

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL
INTELLIGENCE • • • • •

28th VOLUME • • • • •

IVth YEAR - NUMBER 4

• • • • • APRIL, 1913



• • • ROME: PRINTING OFFICE OF THE INSTITUTE, 1913 • • • • •

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Part I: Co-operation and Association

GERMANY.

MISCELLANEOUS INFORMATION.

— EXTENSION OF AGRICULTURAL CO-OPERATION IN GERMANY IN 1912.

Agricultural Co-operation in Germany made remarkable progress 1912. There were no less than 1,541 new agricultural co-operative societies founded and registered in the register of co-operative societies. 227 ceased to exist during the year, the real increase was 1,314. This increase is far larger than those in the two preceding years, for, in 1911, was 1,087 and in 1910 only 813. There was an increase in every class co-operative societies, though in various degree; it was distributed as follows, where it is shown, in the case of each class, as percentage of number of societies existing in the preceding year:

Loan and Savings Banks	683 = 4.21 %
Co-operative Societies for Purchase and Sale . .	89 = 3.83 %
Co-operative Dairies (Co-operative Societies for Sale of Milk)	62 = 1.81 %
Other Co-operative Societies	480 = 15.13 %

Although the rural loan and savings banks were already many, their number has again increased to a remarkable degree, whilst the group of co-operative societies for purchase and sale and that of the dairies has increased in smaller proportion. On the other hand, the societies of other classes than the former have shown the most considerable increase. Among these latter we must note quite especially the increase of the co-operative societies for the distribution of electrical energy, of which there were 342 societies founded; then, there were 12 new societies for the sale of livestock, for hydraulic works, 47 for the employment of machinery, 14 for horse improvement, 18 for horned cattle improvement, and, finally, also, 18 for pasturage of cattle.

That the number of loan and savings banks is so high, in comparison with the increase in the previous year and in view of the high figure already

attained, is due to the foundation of a new federation of co-operative societies in Bavaria. The Union of Bavarian Christian Peasants, with headquarters at Regensburg, at the head of which is the eminent Dr. Heim, a well-known former deputy, has founded an independent federation for inspection, whence the great movement in favour of the foundation of new loan and savings banks. The Provincial Federation of Agricultural Loan Banks, which had already produced good results in Bavaria, was then, for its self preservation, obliged to undertake the foundation of new banks, more actively than before.

The rapid extension of the co-operative societies for the distribution of electrical energy is a consequence of the movement manifesting itself with unexpected force in favour of the distribution of electrical energy in the country. We see that in 1912 the increase was very great, especially in Silesia, Brandenburg, Hanover and Mecklenburg, but above all in Pomerania. In that province, the work was undertaken methodically, with the foundation of central societies, including several cantons in their sphere and having the form of societies limited by shares. The financial basis of the undertaking must be so arranged that the Province, the canton and the consumers each pay $\frac{1}{3}$ rd. of the initial costs. As regards local organisation, 510 co-operative societies for the distribution of electrical energy and for working machinery have been promoted, not all however, as yet definitely founded nor regularly registered.

It may be observed that, in comparison with previous years, few new co-operative societies for dessiccation of potatoes have been formed. 1911 was a bad year for the potato crop. It only amounted to 34,379,000 tons, while the usual crop is 45,000,000 tons. It is very evident that this has hindered the foundation of new potato dessiccation undertakings.

In 1912 the number of the co-operative societies was as follows:

26,576 agricultural co-operative societies	
98 central	" "
16,927 loan and savings banks	" "
2,409 co-operative societies for purchase and sale	
3,488	" dairies
3,654 other co-operative societies.	

The number of members of these 26,576 co-operative societies is nearly 2,500,000. In this number, however, many of the same member are counted several times, for there are many instances in which members belong at once to several societies. But it is hardly possible to arrive at an exact estimate. If we distribute this number of members among the co-operative societies, we have about:

in 16,927 loan and savings banks	1,670,000 members
" 2,409 co-operative societies for sale and purchase	240,000 "
" 3,488 co-operative dairies	320,000 "
" 3,654 other co-operative societies	230,000 "

These figures show in a very significant manner the consolidation of the agricultural co-operative movement in Germany. They let us see that there is still a very wide margin for further development of agricultural co-operative societies in the future. The members of households in the rural communes is more than $5\frac{1}{2}$ millions and that of the independent farmers exceeds $2\frac{1}{2}$ millions. As among the 1,670,000 members of loan and savings banks, there are many who are not farmers, we see that even these banks may become far more numerous and increase the number of their members. The same may be said of the other classes of co-operative societies. However, it must be observed here that the loan and savings banks are engaging more and more in collective purchase and are thus hindering the development of the local co-operative purchase societies.

Out of 12,797 loan and savings banks of the National Federation of German Agricultural Co-operative Societies, 7,611 had been engaged in collective purchase since 1910. In the same way, it is scarcely probable that the co-operative dairies should increase rapidly. The continually increasing consumption of fresh milk in the towns and industrial centres against this in the first place, and, in addition, for technical and economic reasons, it would be better to enlarge the dairies already existing rather than to found new ones, which, as being smaller, would give inferior results. But we must expect a larger increase in the number of co-operative societies of other character, such as has begun in recent years. The following figures confirm our statement:

		Societies
July 1st.	1905	1,443
June 1st.	1910	2,715
End of	1912	3,654

* *

2.—LIABILITY OF THE FEDERATIONS FOR INSPECTION AND OF THEIR INSPECTORS, ACCORDING TO A DECISION OF THE IMPERIAL COURTS.

A decision of the Supreme Court of the Empire on the liability of the federations for inspection and that of their inspectors has excited keen interest in the co-operative world. In recent years it has often happened that the co-operative societies have tried to make the federation and the inspectors liable for their losses. They claimed that the losses were due to the inspection not having been carried out as it ought to have been.

A co-operative society took action in a case of this kind and in the end the Supreme Court of the Empire gave final sentence. On January 24th., 1912 it pronounced a judgment involving important legal

principles with regard to inspection and the responsibility it entails. The judgment was published in the sixth number of the Review of the German Agricultural Co-operative Societies (1), on March 30th., 1912. The general rules that the Court established by this decision are then given together.

(a) *Liability of the Federations for Inspection.*

It is first of all clearly established by this decision that there can be no question as to the duty of a federation to guide the societies affiliated to it. This would be the annihilation of *self-help* and independent management, which are the very foundation of German co-operation.

In this judgment of the Court, no answer is given to the question as to the liability of the Federation, in order that such liability may be shown in its rules, for the facts on which the lawsuit was based do not demand it. The Court contented itself with putting the question whether, in accordance with the provisions of the law on co-operation and inspection, and under what circumstances, an action for damages could be brought. With regard to the legal liability of the federations in inspection, the court expressed itself as follows:

1. It is too little to consider that the federation has no other duty than that of appointing an experienced inspector. When, in §§56 and 60 of the law on co-operation the duty of inspection is mentioned as incumbent on the Federation, it is to be understood that there must be a legal obligation between the federation and its affiliated societies consisting in the simple duty of the appointment of an inspector.

2. The Federation must, in the first place, exercise supervision over the inspectors appointed by it. This is seen in §63, No. 3 of the law on co-operation, where it is laid down that it is the duty of the inspector to present to the Board of Management of the Federation a duplicate copy of his report of his inspections. This provision would have no sense if the Federation were not thereby empowered to intervene in case the work of the inspector were insufficiently or even incorrectly performed. When a Federation observes such deficiency in its inspector and neglects to take the steps the circumstances call for, if need be dismissing the inspector, it will have to compensate for any loss suffered through his action.

3. On the other hand, the Federation is only liable for damages which are really traceable to it. It is only so *culpa in eligendo et in iudicando*, that is to say for damage due to its appointment of the inspector and through its want of supervision over him, in so far as by the law on co-operation this supervisor is a duty incumbent on it. The Federation is not liable for the insufficiency of the work done by the inspector after it has done its duty by appointing and supervising him.

4. The inspector must not be considered as legally appointed to represent the Federation. He is quite simply an expert charged by con-

(1) *Deutsche landwirtschaftliche Genossenschafts-Presse.*

ct to perform a definite service, but has nothing to do with the organization of the Federation. Section 278 of the Civil Code (1) does not apply in any way, and that, above all, because,

5. as is seen, when we consider the intention of the provisions of the law on co-operation and on the inspection to be carried out by the Federation, it is not the part of the Federation to perform the prescribed duties. Too great importance must not be given to article 52, according to which the work of a co-operative society is subject to examination by an inspector.

In accordance with these principles, the court decided that the Federation for inspection accused had not failed in the discharge of its duties. The fact that the inspector omitted to forward to the president of the Federation a copy of his report on the inspection performed by him is only, according to the Court, in form an infringement of No. 3 of art. 63 of the law on co-operative societies, and could lead to no injurious consequences.

(b) *Liability of the Inspector.*

With regard to the liability of the Inspector, the Supreme Court of the Empire pronounced itself to the effect that the inspector, whether appointed by the Federation or by the court, has equally a legal obligation towards the society, as a result of which he is bound to give compensation for damages due to his fault in the exercise of his functions. He is, however, only liable for damage due *purely and simply* to his having failed in his duties, but that must be proved by the plaintiff, that is to say, in the case at point, by the society.

Practically, it is far more difficult than might be thought at first sight, to furnish proof of this. Even when a fault has really been committed, either by the Federation or by the inspector, it is extremely difficult to prove that the loss is directly due to the fault. Besides, as in cases of this kind there will always be a fault also on the part of the society, and especially of its board of management, it is difficult to distribute the liability accurately. Thus a case will seldom present itself in which the inspector or the Federation is exclusively liable for damages.

Everything considered, those concerned, the Federations, inspectors, and co-operative societies, can only congratulate themselves on the conclusions of the Supreme Court. Federations that have carefully discharged the obligations imposed on them by the law on co-operative societies, in relation to the appointment and supervision of inspectors, can not be called to account for losses due to the inspection having been imperfectly carried out. Inspectors who have performed their duties with every care will be freed from all liability. They will, on the contrary, be called to account for losses whenever it is proved that the society has

(1) It is provided in that section that if the legal representative of any one who has duties to perform, or persons employed by him in the performance of the above duties, fail in respect to them, he is liable to the same degree as if the fault were his own.

incurred these through the sole fact of their having failed in their professional obligations either wilfully or through negligence.

As to the societies themselves, they will be able to see from this decision how much importance the Supreme Court attaches to inspection for the security of their business. They must also understand, that if the federations and inspectors assume a serious responsibility, the importance of which cannot be too highly rated, they have a right to corresponding advantages. The way in which the court begins the statement of the grounds of its decision witnesses to the just conception it has of co-operation. It refers to the "independence of the societies, which is the fundamental character of German co-operation."

It is to be hoped that the inspection will always be carefully carried out by those concerned, and, at the same time, that the societies may never lose sight of that just and significant maxim of the Supreme Court of the Empire: "The duty of the board of management is to carry on the business, and that of the council of supervision to supervise it continually."

* *

3.—DEBATES AND DECISIONS OF THE 28th. CONGRESS OF GERMAN AGRICULTURAL CO-OPERATIVE SOCIETIES AT DRESDEN, ON THE 11th. AND 12th. OF JULY, 1912.

Every year, and generally in July, though formerly it was in August, a Congress is held of the German Agricultural Co-operative Societies and Federations belonging to the "Reichsverband der deutschen landwirtschaftlichen Genossenschaften".

This Congress is every year held in a different district within the sphere of the federation. This is in order to diffuse the principles of co-operation in every part of the Empire, and at the same time to allow those who attend the congress to become acquainted with the various forms and manifestations of co-operation. The general meeting of the Congress lasts two days. Generally, previous to this there are two or three days in which special meetings of the various administrative organs of the *Reichsverband* of the Board of Management and the General Commission are held. There are also meetings of the inspectors, of the co-operative dairy instructors and the officials of the employées' insurance societies. The Congress ends with an excursion. In 1912 the two public meetings were held at Dresden on July 11th. and 12th. The members had the pleasure of seeing again among them, Privy Councillor Hoas, of Darmstadt, General Manager and founder of the federation, just recovered from a long illness (1).

(1) On February 8th., 1913, Privy Councillor Hoas was finally lost to the co-operative world. In one of the following numbers of our Bulletin we shall give an account of his life and shall above all dwell on all the benefits agricultural co-operation owes to him.

The discussions opened with a report on the work of the Regional Federation of Saxony by which the Congress was organized. Aulic Coun-
or Bach of Dresden, Manager of the above Federation, showed that
Development of Agricultural Co-operation in Saxony, has long suffered
in the effects of the crisis of 1873 and 1874. This crisis declaring it
after the extraordinary and consequently abnormal development
German economy caused the failure of many credit co-operative so-
ties of Schulze-Delitzsch type. These disasters excited among the
mers a great aversion from co-operative enterprise. It was only
law of 1889 on co-operative societies that again aroused their interest
i sympathy for the idea. Since then, agricultural co-operation has
veloped marvellously in Saxony.

In the summer of 1912 there were 514 agricultural societies, 479
them affiliated to the Federation. The total number of their members
s 28,409. The co-operative loan and savings banks and the societies
collective purchase have developed in Saxony to a quite special de-
ce, for it is in the combination of financial and commercial business
at the farmers most of all find the advantages of co-operation. The
rk accomplished by the societies exclusively for purchase of farm re-
sisties and sale of agricultural produce is not less providential, for there
no other department of business in which there is so little commercial
nesty.

There are comparatively few co-operative dairies in Saxony that have
tained a certain prosperity. This is explained by the fact that the con-
sumption of milk and its products is in excess of the local production,
d no need for co-operation is felt in the case of goods the sale of which
fairly easy. There is another class of co-operative society of great
onomic importance, that namely for water supply. These societies
ve been of great service both for men and animals. The same may
e said of the co-operative pasturage societies which are found in larger
umber in the Saxon than in all the other German federations. They
ve been a great benefit for the general health of the livestock of the
gon. And this assertion certainly loses none of its value, even if there
ve been periods of drought and epidemic which have injured our live-
tock.

The credit co-operative societies and the societies for purchase and
le depend on two central societies: namely, the *Landesgenossenschafts-*
asse (Central Bank for the Saxon Co-operative Societies) and the the
Landwirtschaftliche Zentralgenossenschaft (Central Agricultural Co-oper-
ative Society). Besides this *Zentralgenossenschaft*, Saxony has three
ther institutes organized on similar principles. These are the Co-op-
erative Society for Purchase and Sale for *Oberlausitz* at Zittau, founded
1895; the Co-operative Granary of Löbau, and the Co-operative Mill,
lery and Warehouse of Oberes Müglitztal at Bärenhecke.

This communication was followed by the *Annual Report*, presented
the Rural Economic Councillor Johannsen of Hanover, in the name
the president. A part of this Report includes information we

give, in this article. The rest, consisting of statistical data, we have already reported and amply commented on in the number of our Bulletin for November, 1912. So we do not think it necessary to deal with it further.

The Report presented by Prof. Dr. Dade of Berlin, General Secretary of the Imperial Board of Agriculture, on "the moral and economic force of co-operation in German agriculture," witnesses to a high appreciation and a deep knowledge of the subject. He summarised his report in his interesting conclusion on the "*Limits of Co-operative Action*." He said, "Human action is determined by motives of social and individual character. In its nature, the co-operative movement is social. Yet it must not exclude individual action, which is of great importance in the history of agriculture. Thus the development of co-operation finds its limits where individual action can produce economic and moral results of higher importance for the general interest, and where a certain number of persons desirous of uniting in co-operative societies encounter insurmountable legal and technical difficulties. Therefore it is not advisable to extend the work of a co-operative society to the soil which is the most important factor in production, or to the immediate work of agriculture, since, in such case, obstacles would be placed in the way of the exercise of the personal capacity of the farmer, his independence, his just sentiment of responsibility towards his family and the State. Besides, agriculture would lose the private and family character that it has had in Germany from the earliest times."

Dr. Rabe, of Halle on S., rural economic councillor, then spoke on the following subject: *How far do co-operative societies contribute to a suitable utilisation of farm requisites?*

The speaker showed how the agricultural co-operative societies contribute to the economic and intellectual progress, above all of small and medium farmers, and how quite especially they exert their efficacious influence on the increase of agricultural production by rendering possible a more extensive use of farm requisites. He spoke quite specially of the providential work of the co-operative societies for the supply of cattle food in 1911, when this was scarce. Dr. Petermann, Councillor of Economy at Chemnitz, read his report on the question of the *compulsory declaration of the fatty matter in cheeses*. For many years the producers of the regions in which cheeses are rich in fats and the technical inspectors of alimentary produce have been making propaganda in favour of this. It has naturally encountered opposition from the producers of cheeses poorer in fats. The latter are afraid, on the one hand, of their producer being discredited, and, on the other, that their difficulties in selling will be increased by the high charges for analysis. The meeting accepted the conclusions embodied in the Report. The presenter of the same stated that it was dangerous to apply a simple scale of fixed figures to cheeses and that the matter should be carefully weighed, in order that the various conditions of production in the different regions should be given all their due importance. The Congress therefore charged the Board of Manage-

at of the National Federation to occupy itself in the matter and to see that the interests of the German producers are protected.

Prof. Dr. Falke of the University of Leipzig, spoke of the formation of *co-operative pasturage societies and of farms for the improvement and raising of pigs*. Some years ago Prof. Falke devoted a great deal of attention to the subject and has also himself co-operated practically in the foundation of co-operative farms of this character. The conclusions came to, as shown in the report, are as follows :

"The experiments up to the present made in the field of co-operative pastures dispose us to the belief that in regions where small farms prevail, these pastures meet the requirements of horned cattle improvement. However, the task the co-operative society has to perform is principally educative. In these regions horned cattle improvement can only really advance when each improver owns pastures of larger or smaller area. The economic success of the co-operative pasture societies depends very much on the personal action of their managers.

The foundation of co-operative pig improvement establishments is especially important for regions where this class of improvement is rare or non-existent. In such regions the co-operative society has to serve as an encouragement and guide, while at the same time it provides the means with boars.

Co-operative pig improvement societies may have their influence on the formation of the price of pork, etc. These prices must be regulated both in the interest of the producers and of the consumers, for they are subject to great variation and there is a great difference between the selling and purchase prices. For the purpose, the co-operative societies should work in agreement with the communal councils and make contracts with them, if possible for long periods, for the supply of butchers' meat at cheap and uniform rates. Such agreements might be based on the principle that the town councils might make to the co-operative societies for their working expenses. The effect of such common action would be the drawing together of town and country and the establishment of understanding for their mutual advantage."

Such conclusion of long term contracts between livestock producers and town councils is a matter in which both the public and the co-operative societies have recently taken a keen interest. We shall deal more fully with the matter in the following section.

An equally interesting subject of great present importance was dealt with by Dr. Kapp, Superior Privy Councillor and General Manager of the Prussian Landschaft. He spoke of the *Importance of Public Insurance Institutes for the Rural Population in Co-operation with the Co-operative Societies and Federations*. Thanks to the untiring labours of Councillor Kapp, in recent years, public life insurance institutes for the agricultural population have been founded in six provinces of Prussia. The subject of life insurance has recently acquired even greater interest, for the urban co-operative distributive societies of the Central Federation of Hamburg and the labourers' leagues have undertaken to form a life insurance in-

stitute under the name of *Volksfürsorge*. But as it was feared that an institute of this kind would only consider class interests and thus accentuate class animosities, it was attempted to improve matters by the foundation of a popular national insurance office on a wide basis. Starting from this scheme, Dr. Kapp went on to formulate the following conclusions which were approved by the meeting:

"It is very desirable that life insurance should develop as speedily as possible and that its advantages should be available for every class of the population, and especially of the rural population, which up to the present has been little inclined for this kind of insurance.

The 28th Congress of German Agricultural Co-operative Societies holds that, there is a means perfectly adapted for the accomplishment of this mission, namely public life insurance as it has been for some time transacted by independent life insurance societies in common law.

The public life insurance institutes have it for their end and object to hinder the capital accumulated by savings from leaving the country for the towns and industrial centres, for the purpose of insuring life and thus indirectly favouring and extending the rural exodus, as it may be proved has happened in the case of money invested in private insurance. Such capital must, on the contrary be saved and utilised for the economic development of the districts in which it was produced. It must especially serve for dismortgaging, for the reinforcement of real estate, and for the encouragement of the professional activity of the urban and rural middle classes. This insurance must also serve to excite in the labourer the desire to protect their own interests which is inclined to slumber under the influence of the social political legislation of the Empire, to encourage them in economic independence and to excite in them the sense of their dignity and their responsibility. To attain this end to compulsory old age and disablement insurance as established by law must be added popular life insurance on a wide basis. All this harmonises well with the spirit of co-operation and consequently deserves the unlimited support of the German agricultural co-operative societies and their Federations.

It is also necessary for the general manager to:

1. enter into relations with the Federation of German Public Life Insurance Institutes, in order to lay the necessary basis for the foundation of popular insurance of general utility on a national foundation with the collaboration of the co-operative organizations;

2. promote the foundation of public life insurance institutes, in the States of the Empire or the provinces in which they do not yet exist.

In the fifth section we shall speak more in detail of this collaboration on the part of the co-operative organizations.

The last item on the agenda was dealt with by Herr Hoheneck, Munich, Economic Councillor and General Secretary of the Bavarian Federation of Agricultural Loan Banks and other Agricultural Co-operative Societies, namely: *To what degree and on what conditions are the rural*

and savings banks able to contribute to satisfy the real credit needs of rural areas.

We know that the principal object of the rural loan and savings banks is to grant personal short term credits for the working expenses of farming and not long term real or mortgage credit. However in practice, whether it is that the management of the banks have not the energy to refuse those in need of credit, or that they have a superabundance of cash and desire to obtain higher interest than the central co-operative banks generally give, a large amount of capital has been invested in real credit. This amount of loans entails a danger that the co-operative societies may find themselves with no available capital, above all in moments of financial crisis. So the Congress of Co-operative Societies recommends greater moderation in this class of business. It has laid it down that loan and savings banks must only engage in credit business when there is no risk to their immediate solvency and the necessary funds are guaranteed by special provisions such as those in the Bavarian law on the subdivision of rural land.

* *

— SUPPLY OF MEAT TO TOWNS BY THE CO-OPERATIVE ORGANIZATIONS, ON LONG TERM CONTRACTS WITH THE COMMUNES.

In his report above referred to, Prof. Dr. Falke stated his conclusions, which were accepted by the meeting, maintaining the advantage of contracts of this nature. What led him to these conclusions was the contract entered into at the beginning of 1912 between the towns of Ulm and Neu-Ulm and the Dig Improvement and Fattening Society of the district of Neu Ulm. In that contract the towns undertook for a period of five years to buy a fixed quantity of pork at 126 marks per quintal. The contract contained also other clauses which were reproduced in the number of this Bulletin for August, 1912.

In less time than could have been believed, the resolution of the Congress of Co-operative Societies and the example of the towns of Ulm and Neu-Ulm have had a practical effect. In consequence of the scarcity of meat and the epidemic of thrush, of the economic progress as well as of other influences of an international character, in the autumn of 1912 there was an extraordinary rise in the prices of livestock and of butchers' meat. As a remedy, the government of several States took measures for the facilitation of the supply of livestock and butchers' meat to towns and organizations of public utility. These measures consisted in a reduction of 30 % on carriage and a reduction of the customs dues.

In consequence of this, the communal councils engaged to take measures to facilitate the supply of meat. Many towns even directly

arranged for the import of livestock and slaughtered animals. Yet this immediate action of the communes often enough met with strong opposition on the part of the proprietors of slaughterhouses. Not were the consumers very ready to approve it, above all the poorer classes, who, rightly or wrongly, considered the meat imported from Russia and Holland to be of inferior quality.

Under these circumstances, the national livestock improvers notified the communes that they could supply large quantities of butchers' meat above all of pork, at prices far lower than those current, provided the towns would engage to buy a definite amount for a certain number of years. *Thus everywhere, the desire was manifested for long term contracts for the supply of butchers' meat at fixed rates.*

The various governments themselves encouraged the movement. Thus, on October 25th., 1912, the Imperial Chancellor made the following declaration to Parliament: "I think that we should very seriously consider whether an agreement of this nature between the agricultural co-operative societies and the towns may not have a very beneficial influence on the price of meat."

However, up to the present, as far as can be learnt, the offers made by the co-operative societies and the Chambers of Agriculture together to the communes to supply pigs for five years at a fixed price have been refused, at least by the more important towns, for various reasons. On the one hand, there are administrative reasons, for the communes do not wish to bind themselves by a contract which they will very probably find it rather difficult to observe. On the other hand, there are also economic reasons as the interests of the butchers have to be considered. But there is yet another reason of greater importance, that is the question of price. Although the prices proposed to them are 12 or 15 mark below those of the market to day, yet the communes consider them too high. In fact they calculate on a considerable fall in the present price. To this, the producers reply that the prices they ask are based on the average for the last five years, and that, in view of the general increase in the cost of agricultural production, it is no longer possible to hope for a considerable fall in price of the produce in the future.

Certainly, in the interest of general as well as of agricultural economy it is desirable that a full trial be made of these long term contracts supply. Such is the point of view also accepted by the *Special Commission for the Co-operative Sale of Livestock*, the *Reichsverband* commission expressed in the following resolution:

1. The efforts made to arrange contracts for several years' supply of butchers' meat (pork) to the communes, butchers' corporations, etc., deserve the warmest support, for reasons of general economy. The contracts may lead to a certain regularity of production, and, consequently, to the establishment of the price of the livestock (pigs).

2. The contracts for supply must be based on the special engagement of the producers to supply a certain quantity of livestock.

purpose it is of fundamental importance that the producers should be able to deliver $\frac{1}{3}$ rd, and eventually $\frac{1}{4}$ th, of their ordinary production.

3. The large and powerful co-operative societies for the sale of livestock, that can count on a large quantity of livestock regularly supplied to them by their members, might directly undertake for their account the supply of livestock at a fixed price and bear the risks of eventual fluctuations in the prices. A risk of this kind, however, can only be assumed, as we have said, by co-operative societies for the sale of livestock, which are strong and have a really substantial financial basis.

4. The co-operative societies that are not so strong and have less available money, can only exert an intermediate action. For the purpose, they would have, as we said in No. 2, to oblige their members by special contracts to deliver a specified number of animals.

5. It is not advisable for co-operative societies, other than those for the sale of livestock, to tender for contracts of this sort, even as mere intermediaries, since, for the sale of livestock, experience and special knowledge are required such as the other societies have not. However it be, they wish to engage in this class of business, they must take the greatest precautions.

It is to be hoped that the commission appointed by the Home Office to examine the conditions of the livestock and meat market will throw still more light on this highly important matter, concentrating all its energies on the study.

— THE ACTION OF THE AGRICULTURAL CO-OPERATIVE SOCIETIES IN BEHALF OF POPULAR LIFE INSURANCE.

For the reasons given in § 6, thanks to the foundation of public insurance institutes and the *Volksfürsorge*, the extension of life insurance has become a question of great present importance. The agricultural organizations have the greater interest in it as the number of persons insured among the rural classes is five times less than in the towns. Dr. Hipp accounts for this difference by the fact that the country people are less keen intelligence, and their distrust is aroused by the excessive insistence of the agents of the private societies and above all they are averse from entrusting their modest savings to societies with which they are totally unacquainted. But certainly these are not the causes, we must not overlook important reasons of a material character: agricultural industry yields less in proportion than other industries. The revenue from it is not derived from man's work only, but also from the real estate permanently invested, the real estate. The farmer has, therefore, rather a tendency to invest his savings in developing or improving

his farm. Yet it cannot but be desired that life insurance should be extended among the rural classes.

This refers especially to the arrangement of life insurance contracts with low premiums, such as are usual in the popular insurance societies. It would be a great advantage if this branch of insurance should extend, above all for the poorer classes of the rural population not engaged in farm work. This branch of popular insurance has been hitherto prevented from extending itself by the private popular insurance societies already existing, in which there were serious defects, for they had to bear heavy expenses for management and propaganda. It often happened that the policies were cancelled on account of non-payment of the premiums, which were far too high. It must be added that life insurance societies almost exclusively invested the large amounts of capital formed by the accumulation of their premiums in mortgages on urban real estate. At the end of 1909, the 4 existing life insurance societies had altogether a capital of 4,800,000,000 mks. Of this amount 3,700,000,000 was invested in mortgages; 98% of which were *urban mortgages* and only 1.1% *rural*. 52.2% of these mortgages were on real estate in the district of Berlin alone. And the public life insurance institutes have included among the principal items of their programme the limitation of so unscientific a concentration of the capital derived from the premium, and its investment in a larger proportion in *rural mortgages*.

The result of all this is that more attention is being given to insurance and the foundation of the *Volksfürsorge*, of which we have already spoken, is also, to a large extent, another consequence. The efforts made to oppose to this institution an organization of popular insurance for the general advantage of all classes of the population, independent of any class interest, have already been successful. In fact a combine has been formed of the Federation of Public Life Insurance Institutes (*Verband der öffentlichen Lebensversicherungsanstalten*) and several private life insurance societies which had previously transacted popular insurance. This combine aims at a new development of popular insurance in the interest of the insured, uniting all the scattered forces without in any way limiting the independence or touching the special characteristics of each of the adhering institutes. For this purpose it has been decided that special organizations should be instituted to serve to complete the work of popular insurance and render it more economical above all in what concerns the conditions of insurance, the tariffs, the distribution of profits, the cash business and mutual information.

The largest popular insurance institute, the *Viktoria*, has not yet joined the combine. The large life insurance societies which have not yet transacted small insurance or popular insurance have also remained independent of the combine. These societies, on their side, have founded a special institution, the *Deutsche Volksversicherungs-Aktiengesellschaft* (German Limited Liability Society for Popular Insurance). It is not yet possible to foresee with any degree of certainty what will be the future mutual relations of this latter organisation with the combine of which

we have spoken. There does not exist the most perfect harmony among them at present. The public popular insurance institutes reproach the private institutes with aiming chiefly at making profits, whilst the latter view the competition of the public institutes, supported by the State authorities and the independent corporations, with no favourable eye. Here, as elsewhere, competition has the good effect of exciting interest in popular insurance in a continually wider field.

The *Agricultural Co-operative Societies and their Federations* may very effectually aid in the development of life insurance and eventually in that of popular insurance. In fact, they unite in personal and economic relations more than two and a half million members and in addition extend their influence beyond their own circle. Let us remember there are millions of persons in the country, who, although not registered among the members of the rural credit societies, none the less make use of them as savings banks. Practically, the co-operative societies may assist in the development of insurance by means of contracts between the federations of co-operative societies and the insurance societies. The public life insurance institutes have evinced the desire, which is indeed fully justified, that the co-operative societies should give them the preference, and this desire certainly, deserves to be encouraged, when we consider the character of public utility of the public institutes, and their relation with the political and administrative authorities, the *Landschaften* and the Chambers of Agriculture, and finally their tendency to reserve the amounts of their premiums collected for investment in rural mortgages. Let us must also consider that a large number of federations of co-operative societies have already for many years been in the habit of making contracts of this nature with certain of the most important life insurance societies. In terms of these contracts, the federations and their dependent co-operative societies undertake to provide for propaganda by word of mouth and in writing, to co-operate in the preparation of contracts, to collect premiums, to pay the amounts assured and to regulate matters of dispute. In return for these services, they receive a small compensation. Some federations and a large number of loan and savings banks have founded societies for assistance in cases of death. In most of the co-operative societies these are merely charitable institutions, and the parties concerned can claim no assistance from them legally. Sometimes, again, there are small insurance institutes that transact their business by means of the premiums paid by their members. In this case, their development must inevitably, in the future, be influenced by the efforts of which we have spoken, and which are having their effect. However, for the moment, it is not possible to predict with any certainty in what direction they will develop.

6. — THE NEW LAW ON INSURANCE OF EMPLOYEES, AND OF OLD AGE AND SURVIVORS' INSURANCE FOR EMPLOYEES OF CO-OPERATIVE SOCIETIES.

The Imperial Law of December 20th., 1911 on Insurance of Employees, which came into force on January 1st., 1913, will have considerable influence on the institutions organised for the purpose by the federations of co-operative societies. In consequence of the increase of agricultural co-operative societies, the number of professional employees, to whom the law applies, in the Federations, central co-operative societies and thousands of independent co-operative societies, above all of dairies, is considerable. We shall scarcely go wrong in saying that, in organised agricultural co-operation there are 20,000 employees of the Federations and societies, to whom this insurance law applies. The employees of the professional co-operative societies can only consider it as an advance in the department of social politics. In fact, up to the present, for the most part, the employees of professional agricultural associations have not enjoyed the benefits of sickness and old age insurance.

The law grants to the persons insured an old age pension and pensions for their heirs, besides, in certain definite cases, assistance in case of illness, for the prevention of professional disablement. The funds for this insurance are provided by means of monthly contributions from the employees and the employed in equal proportion. These monthly contributions are in proportion to the wages received. They amount on an average to about 8%, but this proportion decreases when the wages are lower, for then the wage earners are at the same time subject to the régime of the general Imperial law on insurance of employers and employed. The insured employee receives his old age pension on the completion of his 65th. year, or when he is recognised to be disabled; on his death the widow and children receive the pension due to them. The amount of the old age pension is fixed once for all in accordance with the amount of the employee's wages and the number of the payments made by him. An employee of a federation, who, for example, at the age of 25, receives wages at first of 2,500 marks, gradually increased to 5,000 marks, at the age of 65, will receive a pension of 1,586 marks.

If such a pension may serve as a guarantee against extreme need we cannot, however, consider it fully sufficient to ensure a tranquil old age. The co-operative federations, the central co-operative societies and the larger and more prosperous co-operative societies, have, as it were, made it a point of honour to insure their employees against sickness at

age, supplementing the minimum granted by the law. For this purpose, the Imperial Federation and the Raiffeisen organisation five years ago founded the Insurance Society for the Employees of the German Agricultural Co-operative Societies (1) and the Raiffeisen Pension Society (2). Long before the coming into force of the law on State insurance of employees in private businesses, the two pension societies offered the employees the federations and co-operative societies insured with them, a progressively graduated insurance against sickness and old age, while as yet no legal minimum had been established. The amount assured was besides superior to that now fixed by the law. This is because, by the law, the employers contribute to the insurance of their employees 4 % of their wages, whilst the federations and co-operative societies, in their character of employers, already pay a larger proportion to their own co-operative insurance institutes.

However, only a very small group of employees of federations and professional associations benefited by this organisation. On July 1st., 1912, there were 333 members of the Insurance Society of the Employees of the German Agricultural Co-operative Societies, and on July 1st., 1911 there were 299 members in the Raiffeisen Pension Society. That is to say, at most of the employees of the federations and professional co-operative societies were excluded from the benefits of these insurance establishments. The new Imperial Law on insurance of employees of private businesses will introduce important modifications in the organisation of these two co-operative insurance institutes. We cannot yet foresee what they will be, as the legal provisions are not sufficiently clear and there will be other provisions in the executive regulations. The co-operative pension societies very probably act as supplementary societies for the guarantee of new benefits for employees who, by the insurance law, will be compelled to insure in the Imperial Insurance Institute.

These societies will also insure the employees of the co-operative societies, who, as being in receipt of more than 5,000 marks in wages, are not compelled to insure. These are the employees engaged in the office of the management of the federations, the central co-operative societies and a large number of the most important independent co-operative societies. We may mention again that a large group of federations, central co-operative societies and simple co-operative societies have formed special pension funds for their officers and employees. We cannot yet judge of the influence of the imperial law in question on this organisation.

The imperial law on the insurance of the employees in private businesses will doubtless end in the agricultural co-operative organisations occupying themselves more and more with sickness and old age insurance of their employees. This is a great step forward, not only for the employ-

(1) *Versicherungskasse der Deutschen landwirtschaftlichen Genossenschaftsbeamten.*

(2) *Pensionskasse Raiffeisen*

ees themselves, but for co-operation generally. The increasing extension and intensity of co-operative action gives more and more importance to the condition of the employees of the federations and professional co-operative societies. It is therefore the more useful and necessary for them to assure themselves that their employees are satisfied with their situation and determined to devote themselves permanently to co-operation. There is no need of further explanation to show how effectively and efficaciously an insurance of a sufficient sum against old age and sickness favours this end.

BELGIUM.

THE NEW OFFICIAL STATISTICS OF THE AGRICULTURAL ASSOCIATIONS IN BELGIUM.

SOURCES;

RENDU STATISTIQUE DE LA SITUATION DES ASSOCIATIONS D'INTERÊT AGRICOLE PENDANT L'ANNÉE 1910. (*A Statistical Return of the Associations in Connections with Agriculture for the Year 1910*). Department of Agriculture and Public Works, Brussels, Odry, — Mommens, 1912.

The Department of Agriculture and Public Works has recently finished new statistics concerning Agricultural Associations (1), which are the result of a special enquiry made in 1911. The data they give relate to the end of 1910.

As in preceding statistics, the different societies (2) are divided into five categories, which are as follows:

(A) Agricultural Professional Societies (agricultural "comices", leagues, farmwomen's clubs, poultry keepers' and bee keepers' societies, livestock improvement syndicates);

(B) Societies, or Syndicates for the purchase of seeds, manures, feeds and agricultural machines;

(C) Societies, or Syndicates for the sale of milk, the manufacture and sale of butter and cheese. (co-operative dairies);

(D) Agricultural Credit Societies, (agricultural comptoirs, Raiffeisen banks, central agricultural credit banks, Schulze-Delitzsch banks);

(E) Agricultural Insurance Societies (cattle insurance and the insurance of crops).

In the present article, we shall deal with the more important data relating to associations in the first four categories. The statistics of insurance societies are reserved for a future article.

(1) The last statistics published by the Department refer to 1909. They have already called our attention. Cfr. *Bulletin of the Bureau of Economic and Social Intelligence*, No. 1912, page 53.

(2) For the form and character of the Belgian agricultural associations, cfr. *Bulletin of the Bureau of Economic and Social Intelligence*, December, 1910, page 39, May, 1911, November-December, 1911, p. 31, etc.

A. AGRICULTURAL PROFESSIONAL SOCIETIES.

On December 31st., 1910, there were in Belgium 1,775 agricultural societies and federations recognized under the Law of 31st. March, 1898, on professional unions (1); they were distributed as follows:

- 3 agricultural "comices";
- 765 agricultural leagues;
- 13 farmwomen's clubs;
- 234 horned cattle improvement syndicates;
- 3 horse improvement syndicates;
- 280 goat improvement syndicates;
- 1 sheep improvement syndicate;
- 12 dog improvement syndicates;
- 5 syndicates for the improvement of dogs for draught purposes;
- 85 rabbit improvement syndicates;
- 22 pig improvement syndicates;
- 17 beekeepers' societies;
- 27 horticultural societies;
- 1 arboricultural society (pomology league);
- 18 market gardeners' societies;
- 1 society for the prevention of the adulteration of butter;
- 1 veterinary surgeons' society;
- 1 vinegrowers' society;
- 150 poultry keepers' societies;
- 5 beetroot growers' societies;
- 13 chicory growers' societies;
- 12 tobacco growers' societies;
- 34 hop growers' societies;
- 23 strawberry growers' societies;
- 8 pea growers' societies;
- 1 agricultural labourers' society;
- 4 provincial federations of agricultural leagues;
- 1 district federation of agricultural leagues;
- 2 cantonal federations of agricultural leagues;
- 1 federation of chicory growers;
- 1 district federation of kitchen garden societies;
- 1 national federation of poultry keepers' unions;
- 1 regional federation of poultry keepers' unions;
- 2 provincial federations of poultry keepers' unions;
- 2 district federations of poultry keepers' unions;

(1) On December 31st., 1910, the total number of professional unions and of recognized federations, including unions and federations other than agricultural, was 2,689. After the coming into force of the law of March 31st., 1898, a total of 2,689 unions and federations were recognized. Of this number, 252 were no longer in existence on December 31st., 1910.

- 1 district federation of rabbit and poultry breeders' syndicates.
- 4 provincial federations of horned cattle improvement syndicates ;
- 2 district federations of horned cattle improvement syndicates.
- 1 regional federation of horned cattle improvement syndicates ;
- 3 provincial federations of goat improvement syndicates ;
- 7 district federations of goat improvement syndicates ;
- 2 provincial federations of pig improvement syndicates ;
- 3 district federations of hop growers' professional unions ;
- 1 regional federation of strawberry growers' unions.

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1. *Agricultural "comices"*. According to the Royal decree of 1. October, 1889, which regulates the organisation and work of the *comices*, their object is to promote the progress of agriculture, especially means of competitions, shows and the establishment of experimental farms. And in fact, during 1910 they organised 1 provincial competition, 18 district and 83 cantonal competitions. They also distributed 168,742 francs in prizes.

In the following table are given the chief data of the 161 *Comices* of the Kingdom for the year 1910.

Province	Number of "comices"	Membership.	Total entrance fees	Total expense
Antwerp	19	2,913	35,235	29,048
Brabant	21	4,873	63,951	37,702
East Flanders	13	2,860	44,787	44,380
West Flanders	29	5,937	66,373	60,788
Hainault	14	5,232	41,809	18,784
Lège	15	5,967	55,525	43,173
Limbourg	13	1,572	16,551	15,054
Luxembourg	20	8,203	59,023	53,332
Namur	17	2,824	42,003	32,857
Totals	161	40,381	425,257	335,318

These societies, united according to provinces into federations called *Provincial Agricultural Societies* had in the above year 40,381 members, an average of 250 per *comice*.

2. *Agricultural Leagues*. These are unions of agriculturists known as *Leagues*, of which the aim is the study of agriculture and the protection

of agricultural interests. Their sphere of activity may be a market town, a commune, or even several communes. Nearly all these leagues belong to a cantonal, provincial, or national federation.

In the first rank, as is well-known, is the *Boerenbond* (Peasant League), which has its headquarters at Louvain and has already been mentioned here (1).

Although it is the characteristic federation of Flanders, and most of its units are distributed throughout the provinces of Antwerp, Brabant and Limburg, its activity nevertheless, extends to the whole of the kingdom and it has therefore the character of a national federation.

Following it in importance are the *Boerenbond provincial van West-Vlaanderen* for the leagues of West Flanders, and the *Eigenaars-Landbouwersbond van Brugge*, more especially for those of the arrondissement of Bruges. In addition we must also mention the *Landbouwersbond van Oost-Vlaanderen* for the leagues of East Flanders; the *Fédération agricole du Hainaut* for the societies of the province of the same name; the *Fédération agricole de la province de Liège*, the *Ligue agricole du Luxembourg* and the *Ligue de la province de Namur*.

On 31st December, 1910, the number of local agricultural leagues reached 1,150. Out of these, 765 had taken the form of Professional Unions (2). These 1,150 leagues had 74,049 members, of whom 39,658 belonged to recognised unions.

Their distribution according to provinces is shown in the following table:

Province	Leagues recognised as Professional Unions		Leagues not so recognised	
	Number	Members	Number	Members
Antwerp	5	416	87	7,188
Brabant	71	5,062	35	4,121
West Flanders	115	10,213	48	3,941
East Flanders	65	4,932	40	5,341
Hainaut	32	1,773	23	1,248
Liège	54	2,612	3	141
Limburg	15	1,353	143	12,071
Luxembourg	280	8,542	6	321
Namur	128	4,755	—	—
Totals	765	39,658	385	34,391

(1) *Bulletin of the Bureau of Economic and Social Intelligence*, March, 1912, p. 6.

(2) *Bulletin of the Bureau of Economic and Social Intelligence*, December, 1910, p. 10.

As we already know, the chief work of the leagues is in the field of education and mutual aid. The *Boerengilde*, in fact, never appears as a professional union but is always at the same time, itself co-operative or mutual aid society for the benefit of its members. Usually, as a first step, a section is formed for the common purchase of materials, this section then often placing itself in connection with corresponding sections of other associations for the purpose of uniting any orders for goods as possible. Such is the origin of the *Central Purchasing Bureaus*, organised with the support of the federal committees of the leagues, which, owing to the large scale on which their operations are conducted, deal directly with the producers, or the wholesale merchant.

Thus, for example, the purchasing sections of the leagues affiliated to the Louvain *Boerenbond* are in connection with an annexed central counting-house (*comptoir central*) from which they obtain their supplies. This *comptoir* is a co-operative distributive society, under the form of a limited liability company with a capital of 217,000 francs. It has a warehouse at Antwerp and a branch establishment at Hasselt. It is very closely connected with the large federation, many administrators of the latter taking part in the management of the *comptoir*. Nevertheless, it only undertakes the commissions of the purchase sections of those leagues, which are affiliated to the *Boerenbond*, and its business is so distributed that these leagues enjoy their own profits.

With the exception of the *Landbouwsyndikaat van Brugge*, a purchase society for the members of the *Eigenaars- en landbouwers van Brugge*, which is a share society, the purchase societies instituted by the provincial federations of the leagues, are co-operative in form and transact business either with the local sections or with a third party. Naturally the local sections are their principal clients and it is to them that the larger part of the profits is returned, which the co-operative warehouses distribute every year among their clients in proportion to the purchases made by them. The purchase society of the *Landbouwersbond van Oostminderen* is known under the name of the *Syndikaat van den Landbouwersbond* and has its chief offices at Ghent. That of the Hainaut Agricultural Federation bears the name of *Les cultivateurs du Hainaut*, its headquarters are at Enghien. The purchasing sections of the agricultural federation of the province of Liège are specially supplied by the *Union agricole liégeoise* of Liège; those of the Luxembourg league by the *Union agricole, Les agriculteurs Luxembourgeois d'Arlon*, while the purchasing sections of the agricultural league of the province of Namur are connected with the Ermeton-sur-Biert co-operative society (1).

This does not, however, represent the whole work of the leagues. They are occupied with questions of agricultural credit, and insurance against agricultural risks, and they also encourage the formation of syn-

(1) There is also a section for the purchase of agricultural machinery and dairy products, annexed to the purchasing bureaus of the Louvain *Boerenbond*, the Hainaut Agricultural Federation and the Luxembourg League.

dicates for cattle breeding, poultry rearing and beekeeping. They diffuse the principles of agricultural science, by means of lectures and courses of instruction, as well as through the medium of the publications of their federations. They act as technical and legal consultation bureaus for the members and deal with questions concerning the employment of labourers(1).

3. *Farmwomen's Clubs*. The object of these associations, which date from 1906, is, as is well-known, the training of good mothers and housewives. This they try to accomplish by means of small circulating libraries, lectures, visits to model farms and the organisation of agricultural shows and competitions.

The following figures show the development of these institutions from their commencement.

Year	Number of clubs	Membership	Number of lectures	Number of auditors
1906	2	115	4	90
1907	14	1,961	60	3,323
1908	41	4,466	129	8,632
1909	65	6,162	212	12,447
1910	74	6,929	232	14,290

The periodical, "*La Fermière*," which is published by the cartons of Lenze (Hainault) makes their work known.

4. *Beekeepers' Societies*. On 31st. December, 1900, there were in the Kingdom 196 beekeepers' societies, with 5,296 members, i. e. an average of 26 members per society. These are also organised in federations. Under the auspices of the latter and with their co-operation, 411 lectures on bee-keeping have been delivered in 216 centres during the year. The *Chambre syndicale d'apiculture*, a recognised professional union, which has its headquarters at Brussels, is chiefly composed of the delegates of the different federations (2). It constitutes a national committee for the development and promotion of the interests of bee-keepers. T

(1) On 31st. December, 1910, in the leagues which are recognised as professional unions there were 6,457 labourers out of the 30,438 members.

(2) On 31st. December, 1909, there were 8 of these, viz: the *Société apicole de la Campine* with 21 sections; the *Fédération apicole du Brabant* with 36, the *Union apicole du Brabant-Hainaut* with 21; the *Fédération apicole du Hainaut* with 41; the *Fédération apicole du Condroz-Hesbay* with 22; the *Société d'apiculture du Bassin de la Meuse* with 36; the *Société de Mandelbier* at Roulers, with 5, and the *Fédération des agriculteurs du Luxembourg* with

tribution of these societies is as follows : Brabant 45 ; Namur 32 ; Antwerp 23 ; Hainault 21 ; East Flanders 20 ; Luxemburg 19 ; West Flanders 18 ; Liège 12 ; Limburg 6.

5. *Poultry Keepers' Societies.* Of these there were 154 at the end 1910, the total number of members was 7,493, or an average of 48 per society. They are distributed as follows : Brabant 47 ; Luxemburg 19 ; Hainault 19 ; East Flanders 17 ; West Flanders 14 ; Liège 8 ; Antwerp 6 ; Limburg 5 ; Namur 5. Of these societies, 46 are affiliated to the National Federation of Belgian Poultry Keepers' Societies ; 21 are affiliated to the Ornithological League for the protection of useful birds for the advancement of avicultural science ; 15 constitute the National Federation of the professional avicultural unions ; and 32 societies of the *arrondissements* of Brussels are united in the Poultry Keepers' Federation of the same *arrondissement*.

Among the new departures made during the year by the National Federation, the revision of the standards of the native poultry must not be forgotten. The various associations have, further, organised 339 centres in 113 centres.

6. *Horned Cattle Improvement Syndicates.* On December 31st., 1910, there were 502 cattle-breeding societies. They included 20,247 members owning 64,106 registered animals. They were distributed throughout the different provinces as follows : East Flanders 153 ; Brabant 138 ; West Flanders 109 ; Luxemburg 24 ; Namur 21 ; Antwerp 15 ; Hainault 14 ; Liège 10.

In order to obtain as much unity of action as possible, the syndicates of East Flanders and those of the provinces of Antwerp, Limburg, Luxemburg and Namur have united into provincial federations. Further, the Federation of the Herdbooks of East Belgium, at Verviers, the Federation of the Ardennes-Liégeois Herdbooks at Spa, include respectively four and three societies of the Province of Liège. The federations of the cattle improvement syndicates of the *arrondissements* of Brussels and Nivelles direct the work of most of the societies in their respective *arrondissements*.

The Federation of the cattle improvement syndicates of Brabant includes 16 societies belonging to different parts of the province. In addition should be mentioned the federations : *Verbond der Verbonden* (main) and *Provinciaal Verbond van Verbonden* (Roulers).

7. *Goat, Rabbit, and Pig Improvement Syndicates.* At the date last referred to several times, the number of the first was 491, of which 204 were in West Flanders, 204 in East Flanders, 41 in the province of Antwerp, 23 in Brabant, 6 in the province of Limburg, 2 in that of Namur and 1 in the province of Hainault and in that of Luxemburg. In all, there include 46,084 members owning 54,976 registered animals.

The societies of West Flanders are affiliated to four regional federations, with their headquarters at Courtrai, Brussels, Dixmude, and Cortemarck. The majority of the East Flanders societies are grouped into five federations operating in the districts of Alost, Andenarde, Termonde, Saint-Nicholas and Ghent. Nearly all the Brabant syndicates have their headquarters in the Brussels district and form part of a federation, which has its seat at the *Secrétariat des œuvres sociales* of that district. Finally, the syndicates of the province of Antwerp are affiliated to three federations, embracing respectively the districts of Antwerp, Thurnhout, and Malines.

We must note also in Flanders the existence of 39 syndicates for rabbit improvement with an aggregate membership of 1,170. There is also one syndicate for pig improvement at Caeskerke in West Flanders while seven are established in East Flanders, nine in the district of Brussels etc.

8. *Hop Growers' Syndicates.* These associations which date from 1903 have contributed greatly to the improvement of hop growing. They exert their influence by means of lectures of a technical character, experiment farms, visits to model hop gardens, auction markets etc. At the end of 1910, there were 38 such associations, viz.: 21 in Brabant, 10 in East Flanders, and 7 in West Flanders. Their membership has reached 2,194 cultivating 1,129 hectares of hops.

Twenty one of these syndicates are affiliated to a federation having its seat at the *Secrétariat des œuvres sociales* of the district of Brussels.

9. *Beetroot Growers' Syndicates.* At the same date, there were 152 syndicates in existence for the determination of the weight, taste and density of the beetroots sent to the refineries or factories. In the province of Hainault, a certain number of these syndicates also purchase their seed in common.

These 152 societies, which are chiefly in the provinces of Hainault and Limburg, there being 104 in the first and 22 in the second, have a total of 6,651 members. The value of the sugar beet under their control in 1910 amounted to 7,743,088 francs.

The syndicates of Hainault are united in three federations, which have taken the legal form of professional unions. The progress of such associations is clearly seen when it is realized that at the end of 1909 they numbered only 85, and the value of the sugar beet under their control did not exceed 5,556,850 francs.

B. SOCIETIES FOR THE PURCHASE OF SEEDS, MANURES, CATTLE FEED AND AGRICULTURAL MACHINERY.

In the statistics with which we are dealing 1,237 associations of this kind are recorded for 1910. Among these, in addition to the syndicates properly so-called, which are constituted as co-operative societies, and

Law of 18th. May, 1873, on commercial societies, there must also be added the purchasing sections of the above-mentioned agricultural societies and leagues.

The 1,237 societies mentioned are distributed as follows among the present provinces: Luxembourg 272; Brabant 172; West Flanders 169; Limburg 149; Namur 142; Hainault 105; Antwerp 103; Liège 71; East Flanders 54. Their members numbered 73,951 and their total purchases during the year amounted to 18,001,693 francs, divided as follows:

Seed	335,249 francs
Fertilisers	6,309,292 "
Cattle feeds	11,060,885 "
Machines	229,089 "
Other purchases	337,178 "

At the close of 1909, there were 1,123 purchasing societies and sections, with a total of 70,218 members and an expenditure of 17,944,382 francs.

SOCIETIES FOR THE SALE OF MILK, AND THE MANUFACTURE OR SALE OF BUTTER AND CHEESE.

In 1910, 32 co-operative dairies were established bringing the number to 658, as there were 626 in 1909. Of these, 556 are in working order and employ 57,400 members, or an average of 103 per society. These members own 162,850 cows, an average of 2.9 per member.

The dairies in working order are distributed as follows: Limburg 120; Luxembourg 120; Brabant 66, East Flanders 62; Antwerp 61; West Flanders 31; Hainault 23; Namur 9. In the course of the year, they effected the following sales:

Milk	283,325 francs
Butter	39,075,605 "
Cheese	36,580 "
Other produce	398,216 "

Total 39,793,726 francs

average of 71,571 francs per society, and 693 francs per member.

D. AGRICULTURAL CREDIT SOCIETIES.

As is well-known, the Belgian credit societies are of two types: agricultural *comptoirs* and local co-operative societies based on unlimited liability.

1. *Agricultural "Comptoirs"*. The Law of 15th. April, 1884 authorises the General Savings Bank to make loans to agriculturists from a portion of its funds through the medium of the said *comptoirs*. The latter are councils composed of not less than three persons competent in agriculture and united by contract into a society with collective title.

They undertake to fix the limit to which borrowers may be granted credit and to guarantee their solvency, in addition to supervising the current business and prosecuting defaulting debtors. They are jointly responsible, and receive from the institution, which furnishes funds, a certain *ain del credere* in proportion to their guarantee or security. The *comptoirs* act as intermediaries between the bank and the borrowers.

Since 1884, 19 such *comptoirs* have been established, but as have been dissolved, there remain only 16. The number of current loans effected through them was 4,080 on December 31st, 1910 and the total sum advanced was 13,785,731 francs.

In 1910, 786 loans had been made of which the total amounted to 2,927,045 francs.

2. *Rural Banks.* The institutions of the second type are the *Rural Banks* coming under the Law of 18th. May, 1873, on commercial societies. Statistics give the data for 538 banks, divided according to provinces as follows: Luxembourg 136; Brabant 93; Hainault 84; West Flanders 54; Antwerp 49; Limburg 48; Liège 37; East Flanders 24; Namur 13. By virtue of the law of the 21st. June 1894, the General Savings Bank facilitates operations by opening for them credit accounts guaranteed by the Central Banks, which are limited liability societies. At the end of 1910, there were 7 of them, the most important being that of the *Boerenbond*. But the rural banks only draw to a slight extent upon the funds placed at their disposal by the Savings Bank. In conducting their operations, they depend almost entirely upon their own funds and those of their federations. In fact, on the 31st. December 1910, there were 218 banks having credit accounts to the amount of 906,582 francs at the above-mentioned institution. So far, they had only drawn upon these to the extent of 241,366 francs. On the other hand the 7 central banks and 258 local banks, had at the same date deposited in the general bank the sum of 5,797,826 francs, either on current accounts or as savings deposits. The loans made in 1910 by the 538 banks, when replied to the enquiry of the Minister, amounted to 4,043, representing the sum of 4,051,230 francs, distributed as follows:

Loans of less than 250 francs	1,246 for	286,680 francs
„ „ from 251 to 500 francs	997 „	469,690 „
„ „ from 501 to 1,000 „	778 „	696,860 „
„ „ 1,001 and over	1,022 „	2,598,000 „

Of these loans, 197 were guaranteed by preference mortgage, 2 by mortgages, 157 by pledge, 24 by life insurances and 3,402 by securities.

We also give the following general data concerning the 538 banks to which the above figures refer:

Number of members on 31st. December, 1910:

Agriculturists	21,892
Other persons	5,442

NEW OFFICIAL STATISTICS OF THE AGRICULTURAL ASSOCIATIONS 29

Number of loans made to members :

Agriculturists	3,456
Other persons	587
Total of loans made to agricultural members	3,164,556
" " " other members	886,674
Loans deposited in 1910 by agriculturists	8,361,645
" " " other persons	1,639,754
Loans borrowed by the societies in 1910	1,103,839
Loans outstanding on 31st. December, 1910	10,955,072
Balance of the deposits and of the capital lent on 31st. December, 1910	22,912,282
Reserve on 31st. December, 1910	469,160
Total of amount paid up by the members on 31st. December, 1910	81,122

The position of the 7 central banks on 31st. December, 1910 was as follows :

Head quarters of the Central Banks	Number of affiliated local banks.	Number of credit ac- counts granted by the local banks opened with the Gen- eral Bank (outstanding on Dec. 31st., 1910)	Total of credit accounts opened — francs	Number of credit ac- counts granted directly by the central banks, amounting on Dec. 31st. (1910)	Total of these credit accounts opened — francs	Total of sums deposited by the local banks with the central banks (31st. Dec., 1910)	Amount of Reserve Fund
Louvain (1)	304	56	195,900	334	2,618,400	11,529,518	29,941
Liège	34	28	158,000	9	37,200	63,034	1,822
Brugnot	81	48	246,186	8	43,000	76,329	—
Liège	110	89	255,400	—	—	—	3,658
Bruges	27	—	—	8	42,275	318,255	2,935
Montenotte-Biert	12	6	25,600	—	—	320	503
Bray	11	9	38,906	—	—	402,821	205
Total	579	236	920,982	359	2,740,875	12,390,277	39,064

(1) The Bank of Louvain, which belongs to the 'Boerenbond', has created a land credit section. In 1910 this section had made 136 land loans amounting to 359,245 francs.

In order to complete the list of agricultural credit institutions in Belgium, it is necessary finally to mention two popular banks of the Schul-Delitzsch type, those of Goe-Limburg and Argenteau, which make loans especially to agriculturists, and may thus be considered as agricultural banks. In 1910, the Goe-Limburg bank carried out no transactions, but the Argenteau bank, on the other hand, advanced 43 loans of which the total amount was 56,415 francs.

FRANCE.

AGRICULTURAL CO-OPERATION IN FRANCE.

We have received from the French Government the following article, which we insert without alteration.

GENERAL INTRODUCTION.

Agricultural co-operation of late years has made such rapid progress that economists in every country have endeavoured to define with precision the nature and significance of a social movement which, before their own eyes, we may say, has effected a rapid and radical change in the organisation of rural life.

The International Institute of Agriculture has been well advised in taking into consideration this problem, the solution of which demands methodical and careful study of the co-operative movement in agriculture. We must recognise the value of the economic distinction adopted by the Institute which separates co-operative societies (that is those societies whose object is provision for the economic needs of their members through the creation of common funds of capital and labour, or through some system of mutual obligation) from other forms of organisation.

In France, however, this distinction alone does not seem sufficient to enable us to give a clear definition of agricultural co-operation as it is found spread over the whole country. On a closer analysis it becomes evident that the distinction has been based only on the professional position of those co-operating. Thus an essential element has been neglected in not taking into account the special aim of all agricultural co-operative societies, which directly or indirectly, must always be the promotion of agricultural production. Neglect of this must inevitably create confusion between agricultural co-operative societies and the other groups which, though like them composed exclusively of agriculturists and even adopting a co-operative form, cannot be considered as purely agricultural. These societies work in the interest of their own members, not so much as agriculture

its, but as consumers and in other characters apart from their professional one. Certain societies, those for instance for the purchase on advantageous terms of food, clothing, and other supplies for their members, might, without acting contrary to the purpose of their operations, include many who are not agriculturists.

Widening our view by taking into consideration this underlying aim of agricultural production and noting the important principle of solidarity which in greater or lesser degree unites the members of an agricultural co-operative society in mutual liability, a clear definition of the conception and rôle of agricultural co-operative societies has been attempted in France. These societies, notwithstanding the differences in form and the varying degrees in which they present their essential characteristics, it seems possible to divide into four principal categories:

- 1st. Co-operative purchasing societies, generally called syndicates;
- 2nd. Co-operative insurance societies;
- 3rd. Co-operative credit societies;
- 4th. Co-operative societies for production, adaptation, preservation and sale.

If we begin our study of the agricultural co-operative movement in France with the consideration of the fourth class, we shall find a new factor of great importance to its development and more generally to the whole of French co-operation. This factor is the Law of Oct. 29th., 1906, supplemented by the administrative order of August 26th., 1907, which for the first time in French legislation, determined the characteristics of co-operative agricultural societies. Although thus recent, this law is in full force, and we may expect a continuation of the good results of its action during the few years of its existence. What these results are, we shall here try to show.

A. — CO-OPERATIVE SOCIETIES FOR PRODUCTION, ADAPTATION, PRESERVATION AND SALE.

Agricultural co-operation originated in France at an early period; it is said that even in the 12th. century, there were fruit-growing and cheese-producing co-operative societies. In agriculture, as in other trades, co-operation has long existed with very different objects. But in the French law there is no special statute to regulate societies called co-operative or to frame their organisation. A bill on the subject passed the Chamber of Deputies but the Senate suspended the discussion in 1896 and it was never resumed.

At present co-operative agricultural societies are subject to the common law regarding societies. They are regulated either by articles 32 to 1,873 of the Civil Code, or by the Commercial Code and the laws of July 24th., 1867 and of August 1st., 1893. They vary as to their legal form, the prevailing forms being that of civil societies and

that of limited liability companies, with variable capital. The first of these has the advantage of requiring few formalities for the constitution of the society and of leaving to its members the greatest amount of liberty for drawing up its rules and organising its administration. On the other hand, every member is responsible to the extent of his property for the obligations of the society and from this nothing can absolve him except a thirty years' limitation. Limited liability companies with variable capital are, on the contrary, subject to exact and minute regulations as regards their constitution and administration. It is necessary to protect the rights of the third party, for the members are responsible for the debts of the company only up to the amount of their shares.

Under the common law, peasants have constituted many co-operative societies for the adaptation and sale of their produce. They must adjust themselves to the new conditions of modern cultivation and small cultivators must perfect their methods of working to meet the scarcity of labour and to find markets for their crops, if necessary even at long distances. Under these circumstances agriculturists can no longer stand alone but must seek in association the most effective means of overcoming their difficulties.

At present the number of co-operative agricultural societies for production, preservation, adaptation and sale may be calculated approximately at more than 2,600, including about 1,800 societies for the sale of fruit, 500 dairies, 80 societies for the manufacture or sale of wine and for distilling, 20 oil factories, 40 starch factories, threshing societies, etc. These societies, being freely constituted by private initiative, it is not easy to obtain precise information as to their modes of working and the advantages they offer to their members, but their number at least indicates the spread of the co-operative idea in the rural world.

* *

So important a movement could not but attract the attention of the public authorities, and a law for its protection and guidance was passed on Dec. 29th., 1906. This law purports to be a mere addition to the Law of March 31st., 1899, which established the Regional Agricultural Co-operative Credit Banks, and enabled them to obtain, by way of advances free of interest, the advance of 40 million francs and the annual dues paid into the Treasury by the Bank of France in virtue of the law of Nov. 17th., 1897. By the law of Dec. 29th., 1906 the Government may "deduct from the annual dues and forward gratuitously to the Regional Banks special advances intended for the co-operative agricultural societies and repayable within 25 years." These advances must not exceed one-third of the dues paid annually by the Bank of France. By article 3 of this law, "the Regional Banks shall receive from t

operative agricultural societies on the advances made through them, interest fixed by them and approved by the Government after information received from the Commission referred to in art. 5." According to art. 4, "only those co-operative agricultural societies which are composed of the whole or a part of the members of one or more professional agricultural syndicates may receive advances, whatever may be their legal form. Such advances must be made with a view to effect or facilitate transactions concerning the production, adaptation, preservation, or sale of agricultural produce coming exclusively from farms belonging to members, or concerning the carrying out of agricultural works for the general good, but the aim of the society must not be commercial advantage." Another article determines the composition of the Consultative Committee for the division of the funds advanced and article 6 fixes the maximum of these advances at double the amount of the paid capital of the co-operative societies which contract the loan.

These are the provisions of the law of 1906, the construction of which is very simple, so that it is easy to ascertain the essential principles which have inspired the legislature. Of these the first is that societies desiring to benefit by the law must be strictly professional in character, and must be exclusively recruited from among members of agricultural syndicates. Another is the granting of assistance and management to private initiative while stimulating it to further ends. The law grants advances to be repaid by a certain date, and gratuitous assistance. To furnish capital at a low rate to co-operatives is to supply them with the means of carrying on genuine undertakings. But they must not forget that the society can only carry on profitable and profitable undertakings which result in lasting work for the benefit of the members and permit of the due repayment to the State of the sum borrowed in order that it may serve for a new enterprise. A feature of the law is emphasized by the provision which fixes the ratio of the amount advanced to that of the capital paid by the members, that is to say, to the personal effort that they have made. But the legislature, while appropriating to professional groups sums belonging to the community was not encouraging collective self-seeking, nor recognizing legitimate interests. It showed clearly that the co-operative societies which borrow should not do so for gain nor should they accept produce except that sent from farms belonging to members. It has especially indicated the spirit of the law by stipulating that those beneficiaries must make it their object to facilitate the production, adaptation, preservation, and sale of agricultural produce, or the carrying out of works of general utility. It thus encourages a branch of national industry, increases agricultural production, and contributes to the prosperity of the country. Finally this law leaves to agricultural co-operative societies that apply for a loan the right of choosing as hitherto their legal form, thus providing safeguards for private initiative while applying means for effective action.

It need hardly be said that the liberty of co-operative societies which advances have been made, is not left uncontrolled. The decree of August 26th, 1907, has defined with precision the guarantees required by the State from societies which contract loans: the shares must be held in the members' own names, must be reserved for agricultural use and must not bear interest higher than 4 %; the members, or at least some of the members of the committee, must conjointly be answerable for engagements undertaken by the society towards the State: mortgages must be registered for the benefit of the State on real property purchased or re-organised with the sum advanced. The loan is also guaranteed by the intermediary Regional Bank and the accounts and the management of the co-operative society are placed under the control of the Ministry of Agriculture.

The law of 1906 supplemented by articles 25 and 31 of the financial law of 8th. April 1910, by which agricultural co-operative societies are exempted from the tax on personal property and from licensing exercises on agricultural co-operation a vast and daily increasing influence. The peasants were not slow to understand the immense advantage which they would derive from these concessions offered by the State to agriculture, and it may safely be stated that the transformation of cultivation in France is in great part due to the law of 1906, application of which is becoming more widely extended. In 1908, 23 societies obtained loans; 43 in 1909; 73 in 1910; 78 in 1911; 105 in 1912. In 1908 the loans amounted to 964,325 francs; in 1909 to 1,157,250 francs; in 1910 to 2,284,265 francs; in 1911 to 2,364,280 francs, and in 1912 to 2,689,014 fr. At the close of 1912, 293 co-operative societies had benefited at least once by the Law. These loans have been granted to societies with widely differing aims, and the Law has been extended to every kind of co-operation to which it could be applied. It is especially interesting to see the work accomplished by this law in every branch of agriculture, and to judge of its results, whether in renewing the activity of old societies by supplying them with the means of adapting themselves to the conditions of modern production, in reviving languishing societies, or in facilitating the creation of new societies which shall assure to the cultivators the benefits of the recent improvements in agricultural implements.

We shall show by a series of tables, with comments where necessary, the results of the law of 1906 on the various forms of agricultural co-operatives of production, preservation, adaptation and sale.

I. — SOCIETIES FOR THE EMPLOYMENT OF AGRICULTURAL MACHINERY

The law of 1906 has probably had most effect in encouraging the formation of societies for the employment of agricultural machinery. Perhaps it is not too much to say that it is only through this law that such societies have arisen in France, and this is not surprising.

to arise, it is true, where producers are driven to form them upon pain of losing the entire fruits of their labour if they neglect to do so, but, on the other hand, the benefits derived from them are often less evident and more remote. Without speaking of the force of habit, it must be admitted that the cultivator has not a clear notion of the value of time or labour. It needed the increase in wages paid to agricultural labourers and, above all, the scarcity of labour to make the importance of machinery in the cultivation of small holdings evident to the peasant. Every member of these societies had also to learn to regulate his work in accordance with that of his fellow-members, and to realise that the necessary machinery is not exclusively for his own use. To prepare the way for the establishment of co-operative societies and machinery, disinclination and established customs had to be overcome in the peasant before the idea of combination took root in his mind. Another difficulty also had to be met; it had reference not only to the distribution of profit or loss in connection with sales effected in common, but also to the outlay of capital in the purchase of machines not so proved or well understood, and viewed therefore with suspicion by the average peasant. To train these cultivators, it was indispensable to require them at the beginning to disburse large sums, at the same time giving them every assurance that the public authorities were so fully persuaded of the advantages and profit to be derived from the use of machinery in agriculture, that the State was prepared to grant credit on the results. The first step thus taken, the co-operative societies for the use of machinery rapidly increased in number and these establishments, small at first, now rival the larger in the possession of traction-engines, of threshing-machines, winnowers, elevators, feeders, propellers, sowers, mowers, reapers, feeders, manure-spreaders, corn-sifters, husk-separators, chaff-fillers, binders and other machines.

As the following tables show, all the societies for the employment of agricultural machinery which have received loans have been constituted since the promulgation of the Law. In 1909 ten had obtained loans, and in 1912, forty-five. The sum of these loans amounted to 273,742 francs. Such results are creditable to the legislature of 1906, seeing as they do to French agriculture the certainty of continuous progress.

Name of the Society	Date of establishment	Duration of agreement	Form	Paid-up capital
				Francs
« La Fraternelle », Aigrefeuille (Charente-Inférieure)	18 April 1909	15 years	civil	4,800
Alairac Co-op. Soc. (Aude) . .	11 March 1910	unlimited	commercial	4,750
Appoigny Co-op. Soc. (Yonne). .	17 March 1912	15 years	civil	2,700
Beaumesnil Co-operative Soc. (Eure)	3 July 1911	20 years	civil	3,500
Beaurepaire Co-operative Soc. (Isère)	5 August 1908	15 years	civil	4,500
Boisragon Co-op. Soc. (Deux-Sèvres)	12 April 1911	12 years	civil	3,000
Bordes Co-op. Soc. (Yonne) . .	7 July 1912	15 years	civil	3,000
Cadonin Co-operat. Soc. (Dordogne)	9 May 1909	25 years	civil	3,000
Castet-Arrouy Co-operat. Soc. (Gers)	23 July 1911	20 years	civil	2,200
Chauray Co-oper. Soc. (Deux-Sèvres)	15 August 1909	20 years	civil	4,650
Chavagné Co-op. Soc. (Deux-Sèvres)	18 June 1911	15 years	civil	3,400
Chenay Co-op. Soc. (Yonne) . .	28 November 1908	25 years	civil	3,600
Corvées and Bois-le-Roi Co-op. Soc., Vernouillet « La Fraternelle », Douces (Eure-et-Loir)	1st December 1910	99 years	civil	840
« La Fraternelle », Douces (Maine-et-Loire)	2 August 1910	30 years	civil	500
Dreux-Sud Co-op. Soc. (Eure-et-Loire)	21 September 1910	99 years	commercial	580
L'Enclave de la Martinière Co-operative Soc. (Deux-Sèvres) .	19 July 1908	10 years	civil	3,950
Forges d'Amis Co-oper. Soc. (Charente-Inférieure)	17 May 1908	15 years	civil	4,800
Union de Gript Co-op. Soc. .	5 May 1911	10 years	civil	4,600
Marville-les-Bois Co-op. Soc. (Eure-et-Loir)	17 March 1912	99 years	commercial	69
Haute-Loire au Puy Co-operative Soc.	2 January 1909	25 years	civil	10,000
Issigeac Co-operative Soc. (Dordogne)	27 September 1908	25 years	civil	4,062
Jasseron Co-op. Soc. (Ain) . .	2 June 1910	unlimited	civil	2,100
Laurière Co-op. Soc. (Haute-Vienne)	12 July 1908	25 years	civil	2,200
À Reporter				77,590

under cultivation	Loans granted							Intermediary Regional Banks
	1908	1909	1910	1911	1912	Period	Rate of Interest	
						ans		
210	"	"	8,500	"	"	10	2 %	Charente-Inferieure.
266	"	"	"	8,000	"	8	2 %	Toulouse.
176	"	"	"	"	5,400	10	2 %	Yonne.
857	"	"	"	"	6,500	10	2 %	Eure.
200	"	9,000	"	"	"	10	2 %	Dauphiné.
57	"	"	"	"	6,000	10	2 %	Deux-Sèvres.
701	"	"	"	"	6,400	10	2 %	Yonne.
372	"	6,000	"	"	"	10	2 %	Dordogne.
279	"	"	"	"	4,400	10	2 %	Gers.
403	"	"	6,572	"	2,500	8	2 %	Deux-Sèvres.
420	"	"	"	"	6,800	10	2 %	Deux-Sèvres.
754	"	6,840	"	"	"	10	2 %	Yonne.
300	"	"	"	1,000	"	5	2 %	Beauce-et-Perche.
80	"	"	"	1,000	"	10	2 %	Maine-et-Loire.
454	"	"	"	760	400	10	2 %	Beauce-et-Perche.
200	"	7,350	"	"	"	9	2 %	Deux-Sèvres.
412	"	"	9,000	"	"	10	2 %	Charente-Inferieure.
249	"	"	"	9,200	"	10	2 %	Deux-Sèvres.
587	"	"	"	"	1,300	10	2 %	Beauce-et-Perche.
000	"	8,500	11,500	"	"	15	1,50	Haute-Loire.
300	"	8,000	"	"	"	10	2 %	Dordogne,
200	"	"	4,200	"	"	10	2 %	Ain.
550	"	4,400	"	"	"	10	2 %	Haute-Vienne.
029	"	50,090	39,772	19,9 0	39,700	. . .	. . .

Name of the Society	Date of establishment	Duration of agreement	Form	No. of Co.
<i>Brought forward</i> . . . . .	. . . . .	. . . . .	. . . . .	77
Levis Co-op. Soc. (Yonne)	2 April 1911	15 years	civil	2
Longwy sur Doubs Co-op Soc. (Jura)	30 April 1911	10 years	civil	2
Monthoiron Co-operative Soc. (Vienne)	1er May 1909	25 years	civil	2
«La Paranaise» Parancay (Charente-Inferieure)	2 July 1911	15 years	civil	4
Prouais Co-op. Soc. (Eure-et-Loir)	23 May 1911	99 years	commercial	
Quenne Coop. Soc. (Yonne)	15 April 1909	25 years	civil	1
Saint-Césaire-lès-Nîmes Co-op. Soc. Gard)	4 December 1910	30 years	civil	6
Saint-Georges-les Baillargeaux Co-op. Soc. (Vienne)	11 June 1911	25 years	civil	4
Saint-Loup «La Saintongeaise» Co-operative Soc. (Charente-Inferieure)	22 June 1912	15 years	civil	5
Saint-Martin-le-Vinoux Co-op. Soc. (Isère)	10 March 1912	20 years	civil	2
Saint-Maxire Co-operative Soc. (Deux-Sèvres).	16 May 1910	10 years	civil	2
Salut - Use Co operative Soc. (Drôme)	25 April 1909	15 years	civil	1
Thiré Co-operative Soc. (Vendée)	2 May 1909	unlimited	civil	5
Tremblay-le-Vicomte Co-op. Soc. (Eure-et-Loir)	3 March 1912	99 years	commercial	
Treou Co-operative Soc. (Eure-et-Loire)	12 February 1911	99 years	commercial	
Vallères Co-operative Soc. (Indre-et-Loir)	25 July 1911	25 years	civil	3
Vendeuvre Co-operative Soc. (Vienne)	7 May 1911	30 years	civil	3
Villemain Co-op. Soc. (Deux-Sèvres)	20 August 1911	15 years	civil	4
Villiemer Co-op. Soc. (Yonne)	31 January 1910	18 years	civil	2
Voux Co-operative Soc. (Seine-et-Marne)	30 April 1911	20 years	civil	3
Vouneuil-sous-Blard Co-op. Soc. (Vienne)	5 May 1910	25 years	civil	4
Watten Co-op. Soc. (Nord)	1st June 1909	10 years	civil	3
TOTAL . . . . .	. . . . .	. . . . .	. . . . .	145

	Loans granted						Intermediary Regional Banks
	1908	1909	1910	1911	1912	Period Rate of interest	
						Ans	
9		50,090	39,772	19,960	39,700		
5		"	"	3,600	"	10 2 %	Yonne
6		"	"	"	3,000	10 1.50 %	Jura
0		5,000	"	"	"	10 2 %	Vienne
6		"	"	"	9,000	10 2 %	Charente-Inférieure
0		"	"	"	1,350	5 2 %	Beauce-et-Perche
5		3,400	"	"	"	10 2 %	Yonne
7		"	"	"	12,000	10 2 %	Gard
5		"	"	"	7,500	10 2 %	Vienne
5		"	"	"	10,400	10 2 %	Charente-Inférieure
10		"	"	"	4,500	10 2 %	Dauphiné
17		"	"	5,350	"	10 2 %	Deux-Sèvres
15		"	3,500	"	"	10 2 %	Drôme
13		"	10,600	"	"	10 2 %	Vendée
15		"	"	"	1,300	10 2 %	Beauce-et-Perche
19		"	"	440	"	5 2 %	Beauce-et-Perche
37		"	"	"	6,000	10 2 %	Indre-et-Loire
03		"	"	"	5,000	10 2 %	Vienne
19		"	"	"	8,000	10 2 %	Deux-Sèvres
90		"	"	5,680	"	10 2 %	Yonne
00		"	"	"	6,000	10 2 %	Seine-et-Oise
20		"	"	"	6,000	10 2 %	Vienne
50		"	6,609	"	"	10 2 %	Lille
06		65,090	59,552	35,350	113,750		

(Table continued).

SWITZERLAND.

THE ENQUIRY OF THE SWISS PEASANTS' SECRETARIAT IN THE AGRICULTURAL ASSOCIATIONS OF SWITZERLAND (Continued).

SOURCE :

ENQUÊTE SUR L'ÉTAT DE L'ASSOCIATION DANS L'AGRICULTURE SUISSE au 1^{er} Janvier 1910.
Exposé du Secrétariat suisse des Paysans. (*Enquiry into the Condition of Associations
in Swiss Agriculture on January 1st, 1910. Report of the Swiss Peasants' Secretariat*)
Berne, K. J. Wyss, 1912.

§ 3. CO-OPERATIVE AGRICULTURAL SOCIETIES OR SYNDICATES (1).

In the first part of this article we spoke of the Swiss Societies of Agriculture and the Agricultural Associations: we have now to speak of the second group of associations considered in the Enquiry of the Peasants' Secretariat, that, the Agricultural Co-operative Societies, known more usually under the name of Syndicates.

Article 678 of the Federal Personal Law Code includes under the head of co-operative societies any union of persons which, while so forming a society of collective title or a society *en commandite*, or a society limited by shares or a society *en commandite* limited by shares has a collective economic or financial object. These co-operative societies must have their rules signed by at least 7 members, and in order to obtain civil personality they must be registered in the commercial register.

These societies, therefore, in the first place, aim at obtaining economic advantages for their members. and in this respect they differ from the agricultural associations: it is, however, true, as we have had occasion to observe in the first part of this article, that even these latter

(1) For the first part, see *Bulletin of Economic and Social Intelligence*, March, 1912.

present advantages of an economic character, but these are also used by third parties. In practice, however, the differences disappear: associations and syndicates to day resemble each other.

These latter aim as we know at various and often manifold objects, but a strict classification based on economic ends, is very difficult. The organizers of the enquiry therefore thought it best to adopt the same system of classification as in the case of the associations, that is, group the syndicates according to the names they bear.

I. AGRICULTURAL SYNDICATES PROPERLY SO CALLED
(AGRICULTURAL CO-OPERATIVE SOCIETIES).

(A) *Local Agricultural Syndicates.*

Under this heading appear all the syndicates that take the title of Agricultural Syndicates pure and simple: they are 557 in number. Most of them are scattered over the cantons of Zurich, Berne, Lucerne, Schwyz and Aargau: there are none at all in Glarus, Obwald, Basle, Appenzell and Ticino, where, however, the same work is done by agricultural associations started before the syndicate movement, which may say made its appearance in Switzerland after the coming into force of the Personal Law Code, that is in 1883.

Of the 557 syndicates, 435 (78 %) have civil personality, 3 have economic character. The 551 (98.9 %) that returned the number of their members had, on January 1st, 1910: 48,469 members.

The following table shows the distribution of these societies in the cantons:

TABLE V. — *Local Agricultural Syndicates.*

Cantons	Total Number of Syndicates	Syndicates Returning Number of Members	Number of Members on January 1st., 1910	Date of Foundation								Agricultural Syndicates					
				1900-1909	1890-1899	1880-1889	1870-1879	1860-1869	Previous to 1860	Unknown	Economic	Not Economic	Registered		Not Registered		
													in the Commercial Register				
													No.	%	No.	%	
Zurich	69	69	5,093	17	24	19	6	1	1	1	69	—	62	90	7	11	
Berne	192	192	20,961	78	95	17	1	—	—	1	192	—	140	74	50	9	
Lucerne	43	41	3,596	13	21	5	2	—	—	2	43	1	40	93	3	—	
Uri	3	3	85	3	—	—	—	—	—	—	3	—	2	67	1	1	
Schwyz	1	1	46	1	—	—	—	—	—	—	1	—	1	100	—	—	
Obwald	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Nidwald	3	3	219	1	2	—	—	—	—	—	3	—	1	33	2	49	
Glarus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Zug	8	7	394	—	8	—	—	—	—	—	8	—	8	100	—	—	
Fribourg	15	15	1,783	9	5	1	—	—	—	—	15	—	11	73	4	27	
Solothurn	39	37	2,747	20	16	—	—	—	—	3	39	—	28	72	11	18	
Basle-City	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Basle-Country	11	11	850	6	4	—	1	—	—	—	11	—	7	64	4	36	
Schaffhausen	8	8	398	3	4	1	—	—	—	—	8	—	5	62	3	38	
Appenzell A. R.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Appenzell A. L.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
St. Gall	6	6	605	—	4	1	—	1	—	—	6	—	2	33	4	66	
Grisons	14	14	635	9	4	1	—	—	—	—	14	—	6	43	8	5	
Aargau	98	98	8,512	31	56	8	1	—	—	2	98	—	85	87	13	1	
Thurgau	14	13	826	5	5	3	—	—	—	1	14	—	13	93	1	—	
Ticino	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Vaud	22	22	1,269	7	11	2	1	—	—	1	20	2	21	94	1	1	
Valeis	7	7	325	7	—	—	—	—	—	—	7	—	—	—	—	7	
Neuchâtel	2	2	72	2	—	—	—	—	—	—	2	—	—	—	—	2	
Geneva	2	2	53	2	—	—	—	—	—	—	2	—	1	50	1	50	
Total	557	551	48,469	214	259	58	12	2	1	11	554	3	433	78	139	2	

(B) *Federation of Agricultural Syndicates.*

The Federations of the Agricultural Syndicates are the hinges of operative organization in Swiss Agriculture. The local societies associate in cantonal or intercantonal groups, of which there were ten at date of the enquiry, with 105,728 members (1). We shall now give a list of these important associations of the second degree.

1. *Federation of the Agricultural Syndicates of Eastern Switzerland:* Founded in 1886 at Winterthur. It unites the forces of the local syndicates, especially in organizing collective sale and purchase. In 1909 had 154 sections with 12,160 members; in 1910, 162 sections with 695 members. In this latter year it did a total business of 7,544,922 frs. It is 596 frs. per member. Its refunds to its affiliated societies amounted to 132,800 frs. In 1910 its reserve fund was 170,000 frs. and in 1911 180,000.

2. *Federation of the Agricultural Syndicates of the Society of Agriculture of the Canton of Zurich.* Founded in 1896, with head quarters at Winterthur, it had, in 1909-1910, 69 sections with 5,683 members. It did in that period a business of 1,335,260 frs.

3. *Federation of the Agricultural Syndicates of the Canton of Berne and Neighbouring Cantons.* Founded at Berne in 1889, it had at the end of 1909, 179 syndicates affiliated to it with 12,998 members and in 1910, 184 syndicates with 13,525 members. In the working year 1910 it did a total business of 5,360,720 frs.: its reserve fund amounted to 212,900 frs.

4. *Federation of the Agricultural Syndicates of Central Switzerland.* Founded in 1889 at Lucerne, it had at the end of 1909, 39 sections with 65 members.

5. *Federation of the Agricultural Syndicates of the Canton of Fribourg.* Founded at Fribourg in 1907, it had on December 31st., 1910, 42 sections with 8,500 members: the business done by it was 1,802,685 frs.

6. *Federation of Agricultural Syndicates of the Canton of Solothurn.* Founded at Solothurn in 1906, it had in 1910, 36 sections with 3,708 members.

7. *Federation of the Syndicates of the Agricultural Societies of the Canton of St. Gall.* It was started among the societies of agriculture of St. Gall and was organized separately in 1905. At the end of 1910 it had 47 sections with 6,468 members.

8. *Federation of the Syndicates of the Agricultural Society of Thurgau.* Constituted in 1906, in 1910 it had 63 sections and 3,320 members.

9. *Federation of the Agricultural Syndicates of Upper Valais.* Founded at Viège in 1908, it had, in 1909, 200 members.

(1) The total number of members of the Federations is greater than that of the local Societies, because the former include other agricultural associations besides the syndicates.

10. *Agricultural Co-operative Society of Ticino*. Started in 190 Bellinzona, it had, in 1909, 1,950 members. The business done in 1911 was 1,123,932 frs.

CO-OPERATIVE DAIRIES AND CHEESE FACTORIES.

(A) Local Associations:

With the Alpine pasturage corporations, etc., the *cheese-making associations* and *frutières* are among the oldest forms of agricultural association (1): the necessities of the industries for the utilisation of milk have from time immemorial urged the farmers of the mountain regions to unite for the collective manufacture of cheese, etc.

In certain Alpine regions of Switzerland there are still examples of the ancient societies governed on simple and rudimentary principles but with the development of livestock improvement and the consequent increase in the production of milk, many dairies of this class have gradually descended into the valleys.

These typical societies are usually divided into two classes: the first, called *sociétés de fromagerie en fruitière*, especially widely spread in the Canton of Berne, engage a *fromager* (cheese maker) and maintain their dairy produce for their own account; the second, called *sociétés de fromagerie en laiterie*, have also special dairies, but let them to a dealer, who treats the milk for his own account. In Eastern and Northern Switzerland he also utilises the waste products, but in the other regions these are returned to the producers.

The enquiry, however, not to complicate its labours, took no account of this distinction.

It reported altogether 2,785 dairy and cheese making societies. The cantons with the largest number are Berne (600 or 21 %), Vaud (16 %); Zurich (270) (96 %), and Fribourg (262) (9.4 %). Of these, (68 %) are registered in the commercial register. The total number of their members on January 1st., 1910 was 77,277. We find that (12 %) were founded before 1850; 840 (30 %) between 1850 and 1899; 578 (29 %) between 1890 and 1909.

The following table shows the distribution of these societies in the various cantons.

(1) See in the number of this *Bulletin* for October-November, 1910 the *Memorandum on Agricultural Organization in Switzerland*.

TABLE VI. — Local Dairy and Cheese Making Societies.

Cantons	Total Number of Syndicates	Syndicates Returning Number of Members	Number of Members on January 1st, 1910.	Date of Foundation							Local Dairy and Cheese-Making Societies						
				1900-1909	1900-1899	1880-1889	1890-1879	1860-1869	Previous to 1860	Unknown	Economic	Not Economic.	Registered	Not Registered	in the Commercial Register		
No.	%	No.	%														
Valais	270	261	6,448	73	20	44	40	37	37	19	270	—	174	64	96	36	
Gruyère	600	591	17,514	88	87	79	75	164	74	33	599	1	482	80	118	20	
Neuchâtel	207	204	4,217	77	55	23	18	11	9	14	207	—	135	65	72	35	
Uri	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Uri	30	30	565	9	3	3	2	1	3	9	30	—	10	33	20	67	
Schaffhausen	2	2	38	2	—	—	—	—	—	—	2	—	2	100	—	—	
Soleure	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Basle-Stadt	4	4	102	3	1	—	—	—	—	—	4	—	—	—	4	100	
Basle-Landschaft	27	27	645	7	5	1	—	1	1	12	27	—	9	33	18	7	
Lucerne	262	259	7,703	41	34	60	34	48	25	20	261	1	209	80	53	20	
Unterwalden	100	98	2,623	29	19	16	12	20	2	2	100	—	84	84	16	16	
Obwalden	1	1	11	—	1	—	—	—	—	—	1	—	1	100	—	—	
Nidwalden	69	69	2,109	28	10	10	3	10	—	2	69	—	52	82	11	18	
Appenzel A. O.	3	2	87	2	—	—	1	—	—	—	3	—	2	67	1	33	
Appenzel A. U.	2	2	118	2	—	—	—	—	—	—	2	—	—	—	2	100	
Appenzel S. O.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Appenzel S. U.	156	155	3,219	41	35	33	19	19	3	6	156	—	60	38	96	62	
Uri	89	87	3,095	13	11	14	23	16	5	7	87	2	8	9	81	91	
Uri	147	145	4,799	48	14	36	12	34	1	2	147	—	87	59	60	41	
Uri	134	144	4,533	35	18	38	20	36	—	7	133	1	59	38	95	62	
Uri	33	31	808	11	18	3	—	—	—	1	33	—	2	6	31	94	
Uri	470	467	13,406	46	35	44	45	97	146	57	470	—	452	96	18	4	
Uri	56	54	2,318	2	13	16	4	5	9	5	55	1	4	7	52	93	
Uri	53	52	1,648	15	5	7	7	12	6	1	52	1	20	38	33	62	
Uri	56	56	1,291	6	11	10	2	12	13	2	56	6	45	77	13	23	
Total	2,765	2,735	77,227	378	297	437	317	523	334	199	2,772	13	1,895	68	890	32	

(B) *Dairy Associations.*

Under this head we find a few societies which, while they resemble the co-operative dairies in many respects, yet cannot be included in the same class.

The object of the dairy associations is to develop the professional action of their members and collectively influence the establishment of the price of milk. Generally they have no buildings, because they limit themselves to the sale of milk.

The inquiry reported 17 associations of the kind, 10 of which had 1,419 members.

(C) *Cantonal, Intercantonal and Swiss Dairy Societies and Federations.*

These associations are divided into two groups, according to the nature of the interests they represent (a) *Professional Associations, Federations of Milk Producers.* Before speaking of these in detail, let us say that the inquiry has not in this case distinguished between societies with individual members and those with sections.

(a) *Professional Associations.* These include associations of Manufacturers and dealers in dairy produce: On December 31st., 1909 there were three:

1. *Swiss Dairy Society.* Founded at Olten in 1887, it unites the dairy societies and federations and proposes to improve the production and technique as well as the sale of the produce. On December 31st., 1909 it had 12 sections and 1,112 members. Its organ is the "*Schweizerische Milchzeitung*".

2. *Dairy Society of Latin Switzerland.* Founded at Lausanne in 1887, with the same objects as the preceding. It has 178 members.

3. *Fribourg Milk Industry Society.* Founded at Fribourg in 1904, it has 78 members.

(b) *Federations of Milk Producers.* These organisations, of more recent date, aim at the defence of the interests of the producers and above all at obtaining remunerative prices for their milk. The inquiry reports 14 of these, all later than 1903. We give here a list, with the number of sections, of members and of the cows these latter possess.

1. *Federation of Cheese Making and Dairy Societies of North W Switzerland.* Founded at Liestal, it had 168 sections, with 5,424 members, possessing 21,310 cows.

2. *Federation of Cheese Making and Dairy Societies of North E Switzerland.* Its head quarters are at Zurich; it had 273 sections and 6,906 members, possessing 44,000 cows.

3. *Federation of the Dairy Societies of Central Switzerland*. It has its headquarters at Berne and has 95 sections, with 2,561 members and 18,509 cows. In 1911 it united with the Bernese Co-operative Cheese Making Federation and took the name of *Bernese Federation of Cheese Making and Dairy Societies*. The new society has 290 sections and 7,500 members.
 4. *United Geneva Dairies*: 39 sections; 850 members; 3,441 cows and 725 heifers.
 5. *Federation of Milk Producers of Lucerne and Environs*: 36 sections, 331 members.
 6. *Thurgau Federation of Cheese Making Societies*: headquarters at Mönchaltendorf; 104 sections; 3,000 members; 15,000 cows.
 7. *Federation of the Dairy Societies of Zug, Aargau and Lucerne*: headquarters at Zug; 9 sections; 461 members; 4,790 cows.
 8. *Federation of the Lake Lemman Dairies*: 44 sections, 1,120 members; 5,400 cows.
 9. *Federation of Saint Gall Cheesemaking Societies*: head quarters at St. Gall; 440 societies, 790 members; 5,850 cows.
 10. *Federation of Vaud and Fribourg Dairies*: head quarters at Yverne; 168 societies; 4,585 members; 21,279 cows.
 11. *Federation of the Cheesemaking and Dairy Societies of Central Switzerland*, head quarters at Lucerne; 81 societies; 2,195 members; 10,222 cows.
 12. *Federation of the Milk Producers of the Cantons of St. Gall and Appenzell*: headquarters at St. Gall; 7 societies; 487 members; 6,000 cows.
 13. *Aargau Federation of Cheesemaking Societies*: head quarters at Brugg; 73 sections, 2,400 members, 9,500 cows.
 14. *Central Swiss Union of Milk Producers*. with the character of National Central Union; it was formed for the better consolidation of the commercial organisation of producers and the institution of permanent paying courses. It includes all the above federations, except nos. 5 and 8; at the date of the enquiry it had 1,039 affiliated societies, with 29,347 members with 29,347 cows. One of the most important results of this powerful union was the foundation in 1911 of the "*Swiss United Liability Society for the Exportation of Gruyère Cheese (Emmental)*," with head quarters at Brugg.
- The organ of the Union is the "*Schweizerische Zentralblatt für Milch-wirtschaft*".

3. LIVESTOCK IMPROVEMENT SYNDICATES.

The Confederation and the Cantonal authorities have been giving special attention to the encouragement of this branch of agricultural organisation; in the conditions of small property that prevail in Switzerland,

the syndicate is the only serious guarantee of good livestock improvement.

(A) *Local Syndicates.*

(a) *Horned Cattle Improvement Syndicates.* The great development of horned cattle improvement syndicates, largely due to the initiative of the late Dr Kraemer and Colonel J. von Wattenwyl-Elfenau, dates from 1890. The Enquiry reported 913 associations of the kind on December 31st, 1909 with more than 28,400 members; 656(72%) are registered in the Commercial Register; 122(13%), in addition to the proper duties, are engaged in work of an economic character, namely purchase and sale of agricultural produce.

The following table shows how these syndicates are distributed among the various cantons:

TABLE VII. — Local Horned Cattle Improvement Syndicates.

Cantons	Total Number of Syndicates Syndicates Returning Number of Members		Number of Members on January, 1st, 1910	Date of Foundation							Local Horned Cattle Improvement Syndicates							
				1909-10	1890-99	1880-89	1870-79	1850-69	Previous to 1850	Unknown	Economic	Not Economic	Reg- istered	Not Reg- istered				
													in the Com- mercial Register					
											No.	%	No.	%				
ch	126	125	6,804	23	53	14	4	11	7	14	3	123	73	58	53	44		
se	111	111	9,517	70	37	1	—	—	—	3	10	101	82	74	29	26		
ste	23	23	727	5	16	1	—	—	—	—	—	23	23	100	—	—		
l	5	5	114	5	—	—	—	—	—	—	1	4	5	100	—	—		
ryz	29	28	578	16	12	1	—	—	—	—	1	28	24	83	5	17		
wald	5	5	155	2	3	—	—	—	—	—	1	4	5	100	—	—		
dwind	6	6	75	5	1	—	—	—	—	—	1	5	6	100	—	—		
rus	8	8	120	6	2	—	—	—	—	—	—	8	8	100	—	—		
te	7	6	203	5	2	—	—	—	—	—	—	6	7	100	—	—		
rhous	81	79	1,735	45	36	—	—	—	—	—	4	77	51	63	30	37		
ckturn	14	13	163	13	1	—	—	—	—	—	1	13	9	64	5	36		
le-City	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
le-Country	7	7	244	3	4	—	—	—	—	—	—	7	5	71	2	29		
shausen	3	3	120	—	2	1	—	—	—	—	1	2	3	100	—	—		
Appenzell R. E.	12	12	404	6	6	—	—	—	—	—	—	12	10	83	2	17		
Appenzell R. I.	6	6	114	3	1	—	—	—	—	—	2	1	5	3	50	50		
A. Gall	99	98	2,777	56	36	4	—	—	—	—	3	4	95	76	23	23		
Grisons	132	130	3,038	90	38	1	—	—	—	—	3	28	104	97	73	35		
Glarus	23	23	913	9	12	2	—	—	—	—	—	3	20	11	48	12		
Thurgau	22	22	613	10	12	—	—	—	—	—	—	1	21	21	95	1		
Ticino	41	39	1,330	30	10	—	—	—	—	—	1	3	36	30	73	11		
Vaud	102	101	3,618	30	67	4	—	—	—	—	1	48	54	28	76	24		
Vais	46	46	1,838	29	15	1	—	—	—	—	1	9	37	25	54	21		
Vaud	4	4	235	2	2	—	—	—	—	—	—	1	3	4	100	—		
Geneva	1	1	22	1	—	—	—	—	—	—	—	—	1	—	—	100		
Total	913	901	28,434	464	368	30	4	11	7	29	122	791	656	71.8	237	28.2		

(b) *Horse Improvement Syndicates.* — Up to the present, the results of horse improvement in Switzerland have not been good; the institution of syndicates has, however, occasioned a certain progress in this department. The Enquiry reports 44 associations of the kind, 42 of which have 3,821 members; 23 are registered in the Commercial Register, 5 have an economic character. Most of the horse improvement syndicates are to be found in the canton of Berne (17, with 1,636 members), of Vaud (8, with 779 members) and of Fribourg (7, with 5 members).

(c) *Goat Improvement Syndicates.* The first Syndicates of this character were founded in the canton of Zurich, but their progress is of recent date. At the end of 1909 there were altogether 201: 194 (97%) had 6,239 members: 92 (46%) are registered in the Commercial Register. The Cantons with the largest number of syndicates are Berne (67, with 2,400 members), St. Gall (39, with 995 members), Zurich (35, with more than 915 members), Solothurn (25, with more than 980 members). In recent years various other syndicates have been formed; it is calculated that their number is now 220 with 8,265 members.

(d) *Sheep Improvement Syndicates.* As in all countries of intensive agriculture, also in Switzerland sheep improvement is declining. Association in this department of livestock industry dates from only thirty years back. The enquiry reports 38 syndicates of this class on December 31st., 1909, 36 of which had 613 members; 5 were registered in the Commercial Register and 1 was engaged in economic work. Most of the syndicates were found in the cantons of Valais (11 with 126 members) and Fribourg (8 with 96 members).

(e) *Pig Improvement Syndicates.* The progress of these syndicates only dates from 1900. The enquiry reports 48, 46 of which had 121 members; 22 were registered in the Commercial Register and 2 were of economic character. They are found in largest numbers in the cantons of St. Gall, (12, with 227 members), Lucerne (10, with 279 members) and Vaud (8, with 208 members).

(B) Cantonal, Intercantonal and Swiss Federations of Livestock Improvement Syndicates.

(a) *Federations of Horned Cattle Improvement Syndicates.* The livestock syndicates are grouped in the following unions, according to the breed they improve:

1. *Swiss Federation of Syndicates for the Improvement of the Spotted Breed of Horned Cattle.* Founded definitely in 1898, on December 31st., 1909 it included 237 syndicates with 6,898 members, possessing 17,128 head of livestock, 664 bulls, and 16,464 cows. Most of the affiliated societies belong to the Cantons of Vaud (86 with 3,

bers): Berne (61 with 1,441 members) and Fribourg (51 with 5 members).

2. *Swiss Federation of Syndicates for the Improvement of the Brown and of Horned Cattle.* Founded in 1879, at the time of the Enquiry included 222 syndicates with 7,209 members, possessing 21,839 head of red cattle, 21,450 being cows and 349 bulls. Most of the associated syndicates belong to the cantons of St. Gall (81 with 2,248 members), Schwyz (25 with 531 members).

3. *East Switzerland Federation of the Syndicates for the Improvement of the Simmental Breed of Horned Cattle.* Organized in 1898, it had 56 syndicates with 1,450 members and 2,700 head of cattle.

4. *Zurich Federation of the Syndicates for the Improvement of the Simmental Breed of Horned Cattle.* Founded in 1897, it had 20 syndicates.

5. *Federation for the Improvement of Horned Cattle of the Alpine Simmental Breed.* Founded in 1899, at Erlenbach, it is especially concerned with the sale of its members' cattle. At the end of 1905 it had sections with 443 members owning 2,332 cows and 57 bulls. Its organ is the "Alpfleckviehzüchter".

6. *Federation of the Livestock Improvement Syndicates of the Canton Lucerne.* Founded in 1903, it occupied itself with the improvement of red cattle, horses and pigs. It included 21 horned cattle improvement syndicates with 892 members owning, 51 bulls and 2,831 cows.

7. *Swiss Federation of the Syndicates for Improvement of the Black and Red Breed of Horned Cattle.* Founded at Zurich in 1899, it included syndicates with 418 members, possessing 99 prize bulls and 2,453 registered cows.

8. *Fribourg Federation of the Syndicates for Improvement of the Red and Black (Simmental) Breed of Horned Cattle.* Founded in 1903, it included syndicates with 1,022 members owning 239 prize bulls and 4,620 registered cows.

These two last federations have united in the *Fribourg Federation of Horned Cattle Improvement Syndicates*, which organizes an annual bull show at Bulle.

9. *Federation of the Solothurn Livestock Improvement Syndicates.* Founded in 1908, it includes 13 syndicates with 160 members.

10. *Federation of the Livestock Improvement Syndicates and Livestock Breeders of Basle-Country.* Founded at Basle in 1902, it includes horned cattle improvement syndicates of the region and the goat improvement syndicate of Geeterkinden. In 1909 it had 277 members.

11. *Federation of the Vaud Horned Cattle Improvement Syndicates.* Founded at Lausanne in 1898, it had 3,006 members.

(b) *Federation of Horse Improvement Syndicates.*

1. *Bernese Federation of Horse Improvement Syndicates and Horse Breeders.* Founded in 1909, it had about 2,000 members and 2,054 registered horses.

2. *Federation of the Horse Improvement Syndicates of the Canton of Fribourg.* Founded at Fribourg in 1902, it had 600 members with 43 registered horses, and 8 stallions.

3. *North West Association for the Improvement of Halfbred Horses.* Founded at Basle in 1907; it had 76 members.

4. *Horse Improvement Association of the two Cantons of Basle.* Founded in 1904, it had 104 members.

5. *Horse Improvement Association of the Grisons.* Founded in 1906, it had 20 members.

6. *Aargau Horse Improvement Association.* Founded at Brenzgraben in 1901; it had 110 immediate members.

7. *Thurgau Horse Improvement Society.* Founded at Weinfelde in 1894; it had 35 members.

8. *Valais Syndicate for the Improvement of Draught Horses and Mules.* Founded in 1906 at Sion; it had 100 members.

9. *Horse Improvement Society of Latin Switzerland.* Founded at Lausanne in 1871; it had 439 members.

10. *Geneva Horse Syndicate.* Founded in 1912 at Geneva.

(c) *Federations of Goat Improvement Syndicates.*

1. *Zurich Cantonal Federation of Goat Improvement Syndicates.* Founded in 1903 at Dinhard; it had 900 members.

2. *Bernese Federation of Goat Improvers and Goat Improvement Syndicates.* Founded at Berne in 1905; it included 73 syndicates and 3,545 members. Its organ is the "*Schweizerischer Kleinwieszüchter*".

3. *Schwyz Federation of Goat and Sheep Improvement Syndicates.* Founded at Schwyz in 1907; it included 16 goat and 5 sheep improvement syndicates, with a total of 1,000 members.

4. *Fribourg Small Livestock Improvement Society.* Founded at Fribourg in 1902; it had 49 members.

5. *Federation of Goat Improvement Syndicates of the Canton of Solothurn.* Founded at Balstal in 1908; it had 800 members.

6. *Goat Improvement Association of Appenzell R. I.* Founded at Appenzell in 1904; it had 78 members.

7. *Federation of the Syndicates for the Improvement of Toggenburg Goats of the Canton of St. Gall.* Founded in 1891; it had 19 sections and 350 members.

8. *Federation of the Thurgau Goat Improvement Syndicates.* Founded in 1906; it had 693 members.

9. *Swiss Federation of Goat Improvement Syndicates.* Founded in 1906, it had 2,260 members.

10. *Romance Federation for the Improvement of Small Livestock.* Founded in 1882; it had 200 members.

We must add the three following federations founded since the date of the inquiry: *Aargau Federation of Goat Improvement Syndicates* founded at Brugg in 1911. *Federation of Small Livestock Improvement*

4. ASSOCIATIONS FOR THE CULTIVATION OF TREES AND THE UTILISATION OF FRUIT.

(A) Local Associations.

These associations aim at the improvement of the economic conditions of fruit cultivation and at the insurance of remunerative utilisation of fruit: as means to this end the associations resort to the diffusion of professional education among members, the selection of the most paying varieties, the scientific treatment of the produce as well as the defence of the interests of the members when selling, etc.

The enquiry included under this head various classes of societies from co-operative societies for production to those for sale: almost all purchase their members' fruit at the market price; some have complete installations for the preparation of cider; others, by preference, engage in the sale or the drying of fruit. At the date of the enquiry there were in Switzerland 68 associations of the kind: 7 of them called "*Cider Making Associations*" are occupied almost exclusively with the manufacture of cider. Most of the societies (83 %) were formed in the period 1900-1909. The total number of members in 66 of these societies was 3,648.

The cantons in which they are found in largest numbers are Bern (18 with 609 members), Aargau (15 with 1,050 members), St. Gall (11 with 651 members).

(B) Cantonal and Intercantonal Associations and Federations:

1. *Bernese Society for the Export of Fruit*: Founded in 1910 at Oberdiessbach; it had 54 members in 1909.
2. *Bernese Society for the Cultivation of Trees*. Founded in 1907; it had 15 members.
3. *Bernese Association for the Utilisation of Fruit*. Founded in 1901 at Hitzkirch; it had 212 members. Its object is the purchase and sale of fruit and fruit products. It has an installation for the manufacture of cider.
4. *Commercial Fruit Cultivation Society of Central Switzerland*. Founded at Sursee in 1905; it had 210 members. It has an installation for the manufacture of cider and occupies itself with the sale of cider and the purchase of farm requisites and produce.
5. *Nidwald Tree Cultivation Society*: it dates from 1899 and has 75 members.
6. *Glarus Communal Tree Cultivation Society*. Founded at Glarus in 1904; it had 242 members.
7. *Fribourg Society for the Utilisation of Fruit at Givin*. Founded in 1905; it had 215 members.
8. *Tree Cultivation Society of the Canton of St. Gall*. Founded at Wil in 1888; it had 225 members.

9. *Thurgau Fruit Cultivation Society*. Founded in 1906; it had 110 members.

10. *Fruit Cultivation Society of the Canton of Vaud*. Founded at Yverdon in 1908; it had 110 members.

11. *Swiss Tree Cultivation and Vine Growing Society*. Founded in 1894; it is also concerned with viticulture and has both sections for individual members. In 1909 it had 2,793 members. Its organ is "*Schweizerische Zeitschrift für Obst- und Weinbau*".

12. *Swiss Tree Cultivation Society*. Founded in 1913 at Waldhaus-Zellföh. It has sections and individual members. In 1909 it had 17 members. Its organ is "*Der Schweizerische Obstbauer*".

We must further mention the three following associations formed at the closing of the enquiry: *Union of Swiss Societies for Trade Fruit*, founded at Zurich in 1911; *Society for the Cultivation of Fruit and Vegetables of the Canton of Solothurn* (1913); *Lucerne Tree Cultivation Society* (1912).

5. VITICULTURAL ASSOCIATIONS.

(A) Local Associations.

These associations aim at the development of viticulture in all its branches; therefore also in this case the forms of the societies vary greatly, from those for production to those for sale. Some themselves engage in production and have presses, cellars, etc.; they offer a sure guarantee for the purity of their products. Others only undertake the sale of the wines.

The enquiry reported 50 associations of the kind; 5 of these, under the name of "*Wine Press Associations*", have 64 members and their object is the collective utilisation of wine presses. In 1909, 48 of the above associations had 2,744 members. Their distribution naturally corresponds with that of vine cultivation in Switzerland; most are found in the cantons of Vaud (14 with 936 members), Zurich (11 with 600 members) and Valais (9 with 141 members).

(B) Cantonal, Intercantonal and Swiss Viticultural Associations and Federations.

1. *Zurich Viticulturists' Union*. Founded in 1905, besides occupying itself with the general interests of the viticulturists, it undertakes to provide against the adulteration of wine. In 1909 it had a thousand members.

2. *Society of the Wine Farmers of the Right Bank of the Lake of Zurich*. Founded in 1904, it is also engaged in commerce. It had 720 members in 1909.

3. *Viticultural and Tree Cultivation Society of the Left Bank of Lake of Zurich*. Founded in 1906, it had 120 members.

4. *Cantonal Viticultural Association of Basle-Country*. Founded at Arlesheim in 1898; it had 45 members.

5. *Geneva Viticulturists' Association*. Founded in 1900 at Geneva; it is especially engaged in the sale of wine. In 1910 it had 225 members.

6. *Geneva Wine Making Association*. Founded in 1908; it had 42 members. It provides for the collective treatment and sale of its members' wines.

7. *Swiss Viticultural Association*. Founded at Basle in 1910 for the defence of the interests of viticulture, the fight against adulteration and the sale of its members' wines. In 1910 it had 80 members.

6. THRESHING ASSOCIATIONS.

The object of these associations often called : "*Societies for Threshing Grain*," is to enable small farmers to use machine threshers. Almost all possess locomotive machines generally worked by electricity. An enquiry reported 133 of these societies, 96 of them registered in the Commercial Register; 129 of them had 3,946 members. Most of the associations of the kind are found in the cantons of Vaud (71 with more than 2,150 members) and Berne (25 with more than 1,000 members).

7. DISTILLERY ASSOCIATIONS.

The Confederation has the monopoly (1) of alcohol and controls the purchase of the fourth part (a maximum of 30,000 hl.) of the national consumption of *triois-six* and alcohol, from Swiss distillers.

Most of the distilleries, which, for the rest, are almost all in the hands of associations, work for the Confederation. It offers the consignments in lots for from 150 to 1,000 hectolitres and grants the preference to regions in which the potato crop exceeds the demand. The associations supply under the same conditions. While most of the co-operative distilleries distil for the Confederation, some have been formed independently and treat grapes and fruit.

The enquiry reports 53 distillery associations, 41 of them registered in the Commercial Register: the cantons in which there are the most of these associations are Berne (20 with 58 members), Vaud (7 with 11 members) and Solothurn (6, with 87 members).

In the year 1911-12, the associations supplying the State were: They received orders for 28,200 hl.

(1) The monopoly does not extend to distillation from grapes; wine, cider and fruit.

8. RURAL MILLING AND BAKERY ASSOCIATIONS.

The fall in price of grain has caused the cultivation of cereals in Switzerland to be limited almost to the needs of direct consumption : in only 1.44 % of the agricultural revenue is derived from grain. But in certain districts the farmers were unwilling or unable to abandon cultivation entirely, attempt was made to facilitate its utilisation the spot, by collective milling and baking. This kind of association only began within the last ten years. The enquiry reported 39 rural mills and 3 bakeries. The farmers generally purchase an old mill and fit up in modern style. They are now also providing themselves with warehouses. On December 31st., 1909 there were more than 6,000 members of the 39 co-operative milling societies, 24 of which were in the canton Vaud ; three bakeries (Lumbrin, Andwill, Mettmensstetten) had 388 members.

In 1911 a co-operative milling society was founded at Geneva under the title of "*Geneva Agricultural Mills*." In addition to its usual work, it engages in the purchase and sale of agricultural produce.

9. FARM IMPROVEMENT ASSOCIATIONS.

These associations for carrying out works of restriping and farm re-adjustment, drainage and reclamation of land, differ from the other associations in so far as they are often only formed for a specified time; they are dissolved as soon as their object is accomplished.

At the date of the enquiry there were in Switzerland 68 associations of the kind (19 in the Canton of Zurich, 16 in that of Vaud), with more than 3,500 members. They are almost all of recent foundation, as are so the facts giving rise to them, that is the rise in value of cultivated land, the intensification of cultivation and the new social legislation. It is well to mention also the existence of 11 other associations of similar character, concerned with farm improvements, clearing of land, maintenance of roads, destruction of field mice, etc. Of these 9 with 334 members have for their object the destruction of field mice. Of the two other societies one is in the canton of Berne with 20 members, the other in Thurgau with 225.

Lastly, among the farm improvement associations we must include the *irrigation associations*. But as most of these are formed by corporations and communes, the number of voluntary associations is small: the enquiry reports 5 with 146 members : two of them (at Roggwil and Bonfol) in the canton of Berne, 1 (at Sils) in the Grisons, 1 (at Niederlenz) in Aargau, 1 (at Bellinzona) in Ticino.

10. VOLUNTARY ALPINE PASTURE ASSOCIATIONS.

(A) *Local Associations.*

The enquiry was not concerned with the Alpine pasture association of public character, but only with the private or voluntary association for collective utilisation of mountain pastures. It is, however, very difficult to distinguish clearly between the two kinds of organization; the inquiry report therefore hesitated to accept the figures in the Census return of the voluntary organizations. At the end of 1909 there were 227 Alpine pasture associations of this character in Switzerland; 177 had 7,471 members; 27 were registered in the Commercial Register; 11 had an economic character. In a large number of cases the date of the foundation is unknown, for many of them are only gradual transformations of the ancient "Markgenossenschaften."

The cantons with the largest number of Alpine pasture associations are those of Grisons (65), Berne (39), St. Gall (30), Valais (26) and Vaud (19).

(B) *Cantonal, Intercantonal and Swiss Alpine Economy Associations.*

1. *Fribourg Alpine Economy Society.* Founded in 1897. It has 283 members.

2. *Aargau Alpine Economy Society "Wernisegg":* founded Aarau in 1874. It had 36 members.

3. *Vaud Alpine Pasture Society.* Founded at Lausanne in 1884. It had 128 members.

4. *Valais Alpine Economy Society.* Founded at Sion in 1904. It had 64 members.

5. *Geneva Alpine Pasture Society.* Founded in 1909. It had at the end of the year 130 members.

6. *Swiss Alpine Economy Society.* Founded in 1863, reorganized in 1890. Its object is the improvement of Swiss mountain pasture by protecting the soil from damage through atmospheric causes, cultivating the Alpine land, building cattle sheds and making paths, and occupying itself with livestock improvement and dairy farming. It has completed an important work on *Alpine Statistics*, gives special courses, distributes prizes, etc. For some years it has been receiving a federal subsidy of 9,000 frs. It publishes monthly "Alpwirtschaftliche Monatsblätter." The society had 614 individual members and 18 sections with 2,371 members, altogether 2,985 members. At the end of 1911, the sections had increased to 20 with 2,527 members, the independent members to 64 in all 3,174 members.

11. FORESTRY ASSOCIATIONS.

The forestry associations and corporations dependent on the communal authorities were not included in the enquiry; which only reported voluntary associations exclusively concerned with forestry, namely, forestry corporation of *Fällanden* (Zurich), the forestry corporations of *Vorderegg* and *Hinderegg* (Commune of Egg), and the forestry association of *Moos* (Lucerne). The object of all four, which have together 109 members, is the scientific exploitation of forests, and, with the exception of the first, which supplies the market, they only supply their members.

12. FARMING ASSOCIATIONS.

This type of association is very rare in Switzerland and it is only met with among the *tobacco* and *sugarbeet* farmers.

Tobacco is cultivated in districts poorly supplied with water and especially in the neighbourhood of Yverdon, Payerne, Avenches, the neighbouring lake districts, the Broye Valley and the Bernese lake district. It is generally cultivated by small farmers who, if they wish to maintain themselves independent of the dealers, must seek safety in association. The enquiry, however, only reported two associations of the kind: the *Marcelles Tobacco Planters' Association* (Payerne), which was founded in 1897 and had 62 members at the end of 1909; and the *Tobacco Planters' Association of the Valley of the Broye*, founded at Payerne in 1909, with 1,000 members recruited in 51 communes. Both encourage tobacco growing and the collective sale of the produce. The inquiry report calls for a greater development of association, that has proved so useful for thrift in this department, especially if the field of action can be extended to every branch of the cultivation, preparation and manipulation of tobacco.

The cultivation of sugar beet in Switzerland is checked by the lack of sugar factories, the large expenses and the deficiency of labourers. Recently attempt has been made to promote it with the help of association. In 1909 there were two associations of the kind in the Confederation, one at *Kallnach* (district of Aarberg), founded in 1903, with 11 members; the other at *Finsterhennen*, founded in 1904 with 7 members.

13. ASSOCIATIONS FOR THE CULTIVATION OF VEGETABLES.

Under this head are grouped only market gardeners' associations, or those for both gardeners and market gardeners. On January 1st., 1910 there were 6 associations of the kind with 525 members: they are engaged

in the collective cultivation and sale of fresh vegetables. We may mention in addition an "*Association for the Manufacture of Sauerkraut*" with headquarters at Allschwill (district of Arlesheim): it is engaged in the collective cultivation of cabbages for manufacture of sauerkraut. Founded in 1894, it has 30 members.

Let us mention finally the "*Geneva Market Gardeners' Association*", a cantonal society, founded in 1891 with the object of developing market gardening and protecting the interests of its members. At the end of 1909 the number of these was 130.

14. CREDIT ASSOCIATIONS.

(A) Local Associations.

The development of co-operative credit in Switzerland only date from 1900, when the parish priest of Bichelse (Thurgau) founded the first Raiffeisen Bank. The movement extended gradually to all the Swiss Cantons. The rural banks are of pure Raiffeisen type, act as loan and savings banks and are regulated by articles 678-715 of the Federal Personal Law Code.

At the date of the enquiry there were 139 rural banks (153 in 1910 with 10,024 members: 98 of them (70.5 %) were registered in the Commercial Register; 18, in addition to their ordinary business, bought and sold farm requisites and produce.

The following table shows their distribution;

TABLE IX. — *Local Credit Associations.*

Cantons		Number of Associations	Associations Returning Number of Members	Number of Members on January 1st, 1902	Date of Foundation							Local Credit Associations							
					1900-09	1890-99	1880-89	1870-79	1860-69	Previous to 1860	Unknown	Economic	Not Economic	Registered		Not Registered			
														in the Commercial Register					
														No	%	No	%		
St. Gallen	5	3	249	3	—	1	—	—	—	—	2	3	2	40	3	60			
Appenzel A.	6	6	772	6	—	—	—	—	—	—	1	5	6	100	—	—			
Appenzel S.	1	1	71	1	—	—	—	—	—	—	—	1	—	—	1	100			
Uri	4	4	415	4	—	—	—	—	—	—	1	3	4	100	—	—			
Sch. Vis.	2	2	61	2	—	—	—	—	—	—	—	2	1	50	1	50			
Lucerne	19	19	980	19	—	—	—	—	—	—	3	16	15	79	4	21			
Unterwald	28	28	1,790	28	—	—	—	—	—	—	1	27	24	86	4	14			
St. Luc	6	6	620	6	—	—	—	—	—	—	—	6	—	—	6	100			
St. Gallen	1	1	66	1	—	—	—	—	—	—	—	1	—	—	1	100			
Geneva	3	3	124	3	—	—	—	—	—	—	—	3	2	67	1	33			
St. Gallen	31	31	3,041	31	—	—	—	—	—	—	9	22	26	84	5	16			
Basle	1	1	28	1	—	—	—	—	—	—	—	1	1	100	—	—			
Argau	7	7	534	7	—	—	—	—	—	—	—	7	5	71	2	29			
Sargau	4	4	355	4	—	—	—	—	—	—	—	4	3	75	1	25			
Uri	2	2	145	1	1	—	—	—	—	—	—	2	—	—	2	100			
Uri	9	9	418	8	1	—	—	—	—	—	—	9	7	78	2	22			
Valais	10	10	335	10	—	—	—	—	—	—	1	9	2	20	8	80			
Total . . .	139	139	10,024	135	2	1	—	—	1	—	18	121	98	70.50	41	29.50			

(B) *Cantonal and Swiss Credit Associations.*

The principal institution for the federation of the Rural Banks is the *Swiss Union of Raiffeisen Banks*; founded in 1902, for the encouragement of the economic and moral progress of the people on Christian principles. It promotes the foundation of credit associations and co-operative societies of public utility of the Raiffeisen system, organizes the inclusion of its affiliated banks and manages a central bank to act as a clearing house for the separate institutes).

In June 1910 it had 130 banks affiliated to it with 8,155 members; the same year the business done by it amounted to 11½ million francs. In June 1911, the affiliated banks had increased to 153 with 9,854 members.

The union has besides four sub-sections, that is, the *Cantonal Union of St. Gall* and of *Fribourg*, the *Vaud Union of Raiffeisen Banks* and the *Federation of Mutual Credit Associations of Vaud*. Their members are also members of the Swiss Union.

15. BANKS FOR LOANS ON LIVESTOCK.

In order to combat the usurers who took advantage of the farmer when buying livestock, a mutual aid society was founded at Hammerfeld in 1849 to purchase livestock for its members to be paid for in five annual instalments. Loan banks for the same purpose were founded in Zurich and Thurgau. According to the new code, livestock may be given in security for debt, and remain in the possession of the debtor after registration of the pledge in a public register. To prevent usurious extortion, these rights of pledge can only be constituted in behalf of credit institutes or co-operative societies authorized to this end by the Cantonal authorities. When the loan bank is not directly managed by the communal council, it is under its supervision.

The enquiry report only considered associations of private character, of which there were 5, with 457 members: 3 in the Canton of Zurich and 2 in that of Thurgau.

To sum up, at the end of 1909 Switzerland had 139 local credit associations with 10,024 members; 5 local banks for loans on livestock with 457 members and 1 Swiss Union of Raiffeisen Banks with 8,155 members.

16. MUTUAL INSURANCE ASSOCIATIONS.

The Confederation has encouraged the foundation of mutual livestock and hail insurance societies by means of subsidies and special provisions.

(A) *Livestock Insurance.*

It is well to distinguish between the horned cattle, horse and small livestock insurance societies. The first were not included in the enquiry because they are compulsory and so are outside the sphere of voluntary association: the federal law authorizes subsidies to those cantons applying the principle of compulsory insurance to horned cattle, and all 17 cantons have official societies for the purpose. The same motive prevented the enquiry taking account of the insurance of small livestock.

The *horse insurance societies*, however, do not come within the sphere of official insurance. The report of the enquiry mentioned 31 local regional societies. Most (19) are in the canton of Berne; 29 had 3,305 members. Besides these, let us mention 6 cantonal associations: 3,505 members, in the cantons of St. Gall, Zurich, Aargau (Baden),

m, Basle-Country (Liestal), and Grisons (Samaden). We shall mention two national associations, the *Federal Guarantee* (with headquarters in Paris, insuring against disease, death and compulsory slaughter), and the *Swiss Mutual Horse Society*, officially authorized for the whole of Switzerland; it had 3,275 members with 5,952 horses insured about 5 million frs.

(B) *Hail Insurance.*

Founded in Zurich in 1882, the *Swiss Hail Insurance Society* is the principal institution in this department of mutual thrift. It had to contend with great difficulties at the beginning of its career, until in 1889 the federal government came to its assistance with annual subsidies. The federal law of 1893 subsidises the cantons that encourage this class insurance. In 1910 all the cantons except 4 had profited by these facilities: they guarantee subsidies of between 15 and 40 % and pay the costs of the policies.

In 1910 the cantons granted altogether 389,200 frs. for the purpose, and the Confederation granted 194,600 frs.

In 1910 the Society's policies were 60,456 representing an assured amount of 67,420,780 frs. The society had collected 1,060,603 frs. in premiums during the year and paid out 1,104,378 frs. to satisfy 9,081 claims. The year 1910 was a very bad one for the society; in that year the largest number of claims since its foundation were presented.

Besides this society there is another mutual association at Neuchâtel, the *Paragrêle*, working in the viticultural district of the canton. Its policies in 1909 were 639 for 662,302 frs.; it had collected in the year 9,838 frs. in premiums and paid 3,802 frs. in claims.

17. SWISS PEASANTS' UNION.

This large organization on which the association movement of agricultural Switzerland turns, was founded in 1897 for the representation and defence of the interests of agriculture, especially its economic interests. It has sections and collaborating members. Any agricultural federation of Swiss members may belong to it, as also local associations of every kind. The Union has 3,000 confidential agents scattered over all the communes and working with it. Its office for scientific research, the *Swiss Peasants' Secretariat*, studies the conditions of the national agriculture and makes proposals for the improvement of the farming profession. Its organ, "*The Swiss Peasant*," published in French and German, is issued in 100,000 copies. The Union has also an important *Central Office for Information on Prices*, which diligently follows the movement of the market with the assistance of 4,500 correspondents resid-

ent at home and abroad. The information obtained is published weekly in the Bulletin, "*Swiss Agricultural Market Review*." This large organization had in 1909, 24 sections with 144,377 members, who in 1911 had increased in number to 151,468.

§ 4. GENERAL SUMMARY OF THE SWISS AGRICULTURAL ASSOCIATION

Summarizing this long account of the results of the important inquiry on January 1st., 1910, Switzerland had 6,231 local associations; 6,000 of these (97.3 %) had together 293,719 members. If we add the 45 cantonal, intercantonal and Swiss associations with their own members we get a *real* total of 380,129 members. Taking into account the organizations formed of associations, the members of which (346,200) are therefore indirectly affiliated, and the 144,377 members of the Swiss Peasants' Union, we have a total of 870,731 affiliated members.

The following table shows more clearly the number of the Swiss Agricultural Organizations :

TABLE X. — Agricultural Associations.

Kind of Association	Number of Associations			Number of Members on January 1st, 1910
	Total	Returning Number of Members		
		Number	%	
Agricultural Associations	494	482	97.6	66,084
Ornithological, Poultry and Rabbit Improvement Societies	158	156	98.7	8,153
Beekeeping Societies	121	120	99.2	7,330
Agricultural Co-operative Societies	557	551	98.9	48,460
Dairy and Cheese Making Societies	2,785	7,235	98.2	77,227
Dairy Associations and Societies	17	14	82.2	1,419
Horned Cattle Improvement Syndicates	913	901	98.7	28,434
Horse " "	44	42	95.4	3,821
Goat " "	220	213	96.8	8,265
Sheep " "	38	36	94.7	613
Pig " "	48	46	95.8	1,217
Associations for the Cultivation of Trees and the Utilization of Fruit	68	66	97.1	3,648
Viticultural Associations	50	48	96.0	2,744
Threshing Associations	133	129	96.9	3,946
Distillery Associations	53	51	96.2	974
Distillery Associations	39	38	97.4	6,059
Agricultural Mills	3	3	100	388
Agricultural Bakeries	73	69	94.5	3,628
Drainage Improvement and Irrigation Associations	227	177	77.9	7,471
Alpine Pasture Associations	15	15	100	1,874
Working Associations	199	139	100	10,024
Banks for Loans on Cattle	5	5	100	457
Local Horse Insurance Societies	31	29	93.5	7,474
Total Local Associations	6,231	6,065	97.3	293,719
Federations with own Members	95	95	100	86,410
Federations with Sections	81	81	100	346,225
Swiss Peasants' Union	1	1	100	144,377
Total	6,408	6,242	97.3	870,731

Of these 870,731 affiliated members, 266,876 (30.6 %) are members of associations for the encouragement of agriculture generally, 146,471 (16.6 %) for the development of dairy farming, 105,728 (12 %) for the development of the co-operation in agriculture, 78,904 (9.1 %) for livestock improvement, 73,391 (8.4 %) for agricultural insurance.

In the conclusions of the enquiry some information was given of the associations doing *economic* work, engaged, that is, in trade and production. The societies of such character were 4,256; of these 867 (20.4 %) were exclusively engaged in purchase, 444 (10.4 %) in purchase and sale, 40 (0.9 %) in purchase and production, 168 (3.9 %) in purchase, sale and production, 1,858 (43.7 %) exclusively in sale, and especially sale of milk, 715 (16.8 %) in sale and production, 164 (3.9 %) exclusively in production (transformation). Of the 4,256 societies of economic character, 1,115 (35.69 %) are engaged in the purchase of agricultural produce and farm requisites.

The associations occupied in production or transformation are 1,120; 974 devote themselves exclusively to dairy work; 19 to cidermaking, 18 to wine making, 42 to distilling, 10 to both cider making and distilling, 8 to the grinding of corn for cattle food, 19 to that of wheat for bread and cattle food; 4 to grinding wheat; 35 to other kinds of production.

Among the associations of economic character, 2,434 (57.2 %) have their own buildings for their industries.

APPENDIX.

I. Questions which all Agricultural Associations must answer.

- | | Title of Association |
|---|----------------------|
| 1. Title and head quarters of association | Head quarters |
| Answers | |
| 2. In what "year" was the association founded? In the year | |
| 3. How many "members" are there now (1909) in the association | |
| 4. In what "political communes" do the members live? | |
| 5. Who is the president of the association at present? | |
| 6. Who is the secretary of the association at present? | |
| 7. Who is the treasurer of the association at present? | |

What are the "aims" and "duties" of the association?

II. Questions to be answered only by Agricultural Associations
for Economic Ends.

Which of the following "farm requisites" are regularly "bought" in large quantity by the association? *Artificial Manure**, *Flour for Cattle Food**, *Bran**, *Cereals for Cattle Food**, *Flour for Bread**, *Grain**, *Other Seeds**, *Potatoes for Planting**, *Potatoes for Food**, *Oilcake*, *Straw**, *Hay**, *Agricultural Machinery**, *Wine**, *Sugar**, *Groceries**, *Cloth and Clothes**, *Household Articles**.

(*) Underline the names of the articles bought. Insert names of other articles bought in large quantity through the society.

Which of the following articles of agricultural produce are "sold" in large quantities through the medium of the association? *Milk**, *Cheese**, *Butter*, *Grain**, *Potatoes*, *Fruit*, *Wine**, *Cider**, *Hay**.

(*) Underline the names of the articles sold. Insert names of other articles sold in large quantity through the medium of the association.

Does the association possess "real estate", such as is hereunder mentioned, as collective "property", (co-operative or corporate)? *Cheese Factories**, *Other Dairies**, *Mountain Stables (châlets)**, *Mills**, *Presses**, *Forests**, *Pastures**, *Other Cultivated Land**.

(*) Underline the real estate possessed.

Date

Name and Address of Correspondent

Part II: Insurance

GERMANY.

I. THE CONFERENCE OF PROFESSIONAL ASSOCIATIONS R AGRICULTURAL ACCIDENT INSURANCE, AT MUNICH.

SOURCES:

ERHANDLUNGEN der in der Zeit vom 28 September bis 10 Oktober 1912 in München abgehaltenen Konferenz der deutschen landwirtschaftlichen Berufsgenossenschaften. (*Report of the Conference of Professional Associations for Agricultural Accident Insurance, held at Munich from September 28th., to October 1st., 1912*).

In the number of our *Bulletin* for January, 1912, we showed the general results of the new organization of agricultural accident insurance, laid down by the Imperial Order on Insurance issued in June, 1911. A further Order of July 5th., 1912 enjoined that the provisions of that of 1911, relating to agricultural accidents should only come into force on January 1st., 1913. Therefore, the Munich Conference of Professional Associations for Agricultural Accident Insurance is of special interest, as the last held under the Imperial law of 1900, and we know how the period of transition preceding the coming into force of a new law always gives rise to new and complicated problems. The Imperial Insurance Bureau, the Prussian Home Department, the Insurance Bureau of the Kingdom of Bavaria and the Bavarian Agricultural Board, were all represented at the Conference, and 48 German professional associations for agricultural accident insurance sent one or more representatives. It was the first time Dr Kauffmann, Superior Privy councillor, and President of the Imperial Insurance Bureau, took part in the meetings of a congress of these associations.

In the following pages we shall give the principal reports presented and the most important decisions come to.

I. — *Medical Attention during the first 13 Weeks after the Accident, the Instructions issued by the Imperial Insurance Bureau on December 14th., 1911.*

The Report was read by Prof. Dr. Sittmann of Munich. He began observing that employers have too long considered the sole object of accident insurance to be material compensation in case of a wound or death, without taking into account the effects on the sufferer's mind. Certainly the tendency of the insured labourers to speculate on their accidents, that is to consider an accident as a good way of obtaining an income, has contributed to this. But both tendencies must be combated not only in the interest of the professional insurance associations, but also in the general interest, so that the injured workman may not go back to his labour hale and fit for work, but also return to his previous mental and moral condition.

It was precisely these ideas that inspired the Circular issued by the Imperial Insurance Bureau on December 14th., 1911, when it declared that "to assist the injured workmen with money is not the highest duty of the professional insurance associations; they must try to help him to recover as early as possible his fitness for work and consequently the peace of mind that employment gives." Now the first condition for attaining these ends is the speediest possible treatment of the injured workman, because it is only by *immediate* treatment that the evil effects of the accident may be reduced or altogether got rid of. For this reason the professional insurance associations, while only legally bound to pay for the treatment of the workman from the 14th. week after the accident, undertake to pay for it during the first thirteen weeks. Theoretically the best way to cure the injured man quickly would be to send him immediately to an accident hospital, where all the resources of science would be available for diagnosis and treatment, and where the doctors are generally more experienced in this kind of case. But it is not always possible to take him from his family, and, then, many associations are afraid that the expenses they would incur, if they made a rule of sending the injured workmen to hospitals, would be too great. Add to this, that often doctors oppose the foundation of such hospitals, as they consider it contrary to their interest; they assert that the centralising of the treatment of wounds in special hospitals not only injures all other private and university hospitals, preventing the study of many interesting cases in them, but it cannot even be considered as an advance from the point of view of treatment, as to bring together in one and the same institute so many injured workmen may lead to a kind of psychical infection and hence to exaggeration and simulation. Prof. Sittmann held that it was possible to overcome the above difficulties and that the opposition of certain groups of doctors was unjustified and, on the contrary, he advised

d the foundation of new accident hospitals. At present, the institutions on which the German professional associations can rely for the treatment of their sick have at their disposal 250,000 beds; he held it to carry out the Instructions of the Imperial Insurance Bureau, at least 30,000 additional beds were needed, which, at the rate of 5,000 marks per bed, would cost 150 million marks. In deciding whether to send a workman to an accident hospital or not, it is not so much the seriousness of the injury that is to be considered, but whether the doctor attending him himself proposes that he be sent or whether he has been able to diagnose the case with certainty. Section 580 of the Imperial Order Insurance grants the professional associations the right to undertake payment for the treatment of the injured even in the period preceding the payment of pension; that is in the thirteen weeks immediately following the accident. But the text of the law expressly states that if the patient is to be treated in a hospital, his consent must be first obtained, if he is the head of a family or has otherwise to contribute to the support of his family. In some cases however, this consent is not necessary: namely, when the treatment of the patient in his own house would not be possible, in cases of contagious disease, etc. In this connection, Prof. Sittman pointed out the difference between Northern and Eastern Germany, where the prevailing extensive farming requires the employment of a large number of casual hands, few of whom are heads of families, and Southern and Western Germany, where, on account of the general intensive cultivation, the number of small landowners, heads of families, is greater. Therefore in the former districts it would be much more seldom necessary to ask for the above consent of the patient than in the latter, and hence, the agricultural and forestry professional associations of Southern and West Germany would have much greater difficulty in obeying the instructions of the Imperial Bureau than those of the other regions. After showing at length that the medical profession ought not to regard with distrust the intervention of the professional insurance associations in the treatment of the patient in the first thirteen weeks, he formulated the following conclusions:

(1) Experiments hitherto made have shown there are great differences in the effects of an accident, giving legal claim to a pension, and those giving no such claim. These differences, which are to the disadvantage of the victims of accidents entitled to pension, are seen both in the duration and the seriousness of the functional disturbances.

(2) The causes of these differences are to be sought for in the mental and moral conditions and special attention must be given to them if we want to prevent their having sufficient influence to affect the national character.

(3) The best means of dealing with these 'moral conditions' — that may manifest themselves after the accident, without being really a direct consequence of it — are: (a) the speediest possible treatment of organic injuries, even those not likely to give rise to functional disturbance, so as to take away all excuse, all ground for unfounded ideas on the part of

the patient; (b) for this purpose a kind of moral reaction is required, to efface any damaging impression made on the mind of the patient; (c) it is rather as in estimating the diminution of working capacity no account is taken of the moral conditions.

(4) The most suitable means of attaining this end is that indicated in the Instructions of the Imperial Insurance Bureau of December 14th., 1911.

(5) Many difficulties are met with in the carrying out of these Instructions, some of them relating especially to agricultural and forestry professional associations. These difficulties are: (a) the insufficient number of accident hospitals (especially in the country districts) satisfying the requirements of the Bureau; the topographical conditions, the means of communication, etc.; (b) the right granted by the law to the patient to choose his own hospital; (c) the consultation of the interest of the doctor in charge.

(6) In a certain number of cases the patient should be at once placed in an accident hospital, without considering the above difficulties: *fortiter in re, suaviter in modo*. But in most cases they may be overcome, by interpreting the Instructions of the Imperial Bureau in a wide sense, and taking into consideration the special circumstance of the patient.

(7) The doctor's moral interest rightly understood will not suffer from this intervention of the professional associations, and any material loss may be avoided or compensated.

There was also a second report on the same subject by Pny Councillor Dr. *Schroeder*, for more than twenty years occupied in the management of the Agricultural Professional Association of Hesse Nassau. He observed first of all that the application of the Instruction issued by the Imperial Insurance Bureau, recommending the industrial and agricultural professional associations to undertake the cost of treatment of patients even in the period of investigation, is especially difficult in the case of agricultural associations. First of all, sickness insurance, in terms of the Imperial Order of 1911, will only become compulsory on January 1st., 1914, and at present a large number of agricultural employers insured against accidents are not insured against sickness. In addition, the country doctors are perhaps less ready than others to send patients to a hospital, either because they honestly do not see the necessity, as they have no special acquaintance with Röntgen apparatus, etc., or because they are afraid of losing the reputation in the country, if in every serious case of accident the patient is withdrawn from their charge. But, on the other hand, Dr. *Schroeder* doubted whether the country doctors are sufficiently prepared to exert a beneficial influence on the mind of the patient, although he recognises the necessity for the doctor of the association (he would prefer that there were one attached to each section, instead of only to the presidential bureau) coming into relation with the doctor treating the patient.

consulting with him. And after having indicated a few defects in medical instruction from the social point of view, he gave his assent to the conclusions of the previous speaker, holding that the contribution of professional insurance associations to the cost of treatment during the first thirteen weeks is absolutely necessary, not only in the interest of the patients, but even in the real interest of employers and hence of the national agriculture.

Two other Members of the Congress presented reports on the same subject, namely, Prof. Dr. Liniger of Düsseldorf and Dr. Grosse, both of them representing agricultural professional insurance associations of Rhenish Provinces.

Prof. Dr. Liniger told the conference how the Rhenish associations contribute to the initial cost of treatment. He reminded his hearers that the 3rd International Congress for the treatment of victims of accidents, recently held at Düsseldorf, had already recognised the great importance of medical treatment within the first 13 weeks from accident and especially the benefits of massage and artificial restraints, in cases of fracture, when every care is taken. And he mentioned various cases of accidents in the experience of the Rhenish Association in which the advantages of the prompt treatment of the injured were evident; he laid before the Conference a large number of X-ray and other photographs (some of them reproduced in the published proceedings), showing the ill effects in cases of fracture, especially fracture of the thighbone, from the patient being treated at home in small and unsuitable rooms. Prof. Liniger expresses his conviction that, on an average, in the agricultural professional associations, 75 % of the accidents reported should require compensation, but a medical service requires to be organized before this ideal can be realised; the reports must be promptly forwarded to the confidential officers and to the headquarters of the association, where there must be an officer in charge of the medical service, capable of supervising the work of the doctors attending the patients and that of the doctors of the association, as also the hospital service, and therefore expert in matters of accidents and possessed of a knowledge of the locality.

Dr. Grosse held that the professional agricultural associations should, following the example of the industrial associations, give more importance to the organisation of the first aid service, if possible entering into agreements with the Red Cross institutions. The Agricultural Association of the Rhenish Provinces is making an arrangement of this kind in this way it counts on being informed of accidents much more promptly than has hitherto been the case. Meanwhile, it has made a contract with the sickness societies which, in cases of greater urgency, must immediately send the workmen, victims of accidents, to an accident hospital of the association, without waiting for the decision of the association doctors. Finally, the association is arranging with the local medical boards, so that the medical reports of accidents may

all be made out after the same model and Dr. Grosse considers more advisable the institution of confidential doctors of the association as intermediaries between the association and the doctors in charge. He expressed his pleasure finally in the fact that, while, up to the present, the professional agricultural associations have been used to occupy themselves with the question of compensation and the most suitable means of treatment only in the 14th week after the accident, they are now seeking to make provision for suitable treatment immediately after it takes place.

Dr. Stahl, Representative of the Agricultural Professional Association of Westphalia, took part in the debate, declaring himself favourable to the centralization of the medical service, in opposition to Privy Councilor Schroeder, who had expressed the opinion that the treatment of the patients during the period of investigation might be best confided to doctors attached to the separate sections of the associations. Only centralising the medical service in the hands of one person, can we, in his opinion, have the most certain guarantee that the medical questions involved are treated by competent persons.

Dr. Schroeder also, the representative of the Silesian Agricultural Association, spoke in opposition to an observation of Privy Councilor Dr. Schroeder's, that it was doubtful whether the professional association can, in accordance with § 606 of the Imperial Order on Insurance, threaten to decrease the amount of compensation if the patient refuses to conform to the system of treatment prescribed by the association. Dr. Schroeder held, on the contrary, that, in accordance with §§ 1, 583-1, 596 and 952 of the Imperial Order, the professional agricultural association really have the right to threaten such decrease in the amount of compensation when the patients rebel against the treatment prescribed.

Privy Councillor *Noel*, while substantially in agreement with the presenters of the reports, still wished to make some reservations, in accordance with his personal experience as member of the Professional Agricultural Association of Posen. The Instructions of the Imperial Insurance Bureau say that the association must, as soon as informed of an accident, discover whether the sickness society has occupied itself with the treatment of the victim. If it has not, the association must as promptly as possible occupy itself in the matter and subject the patient to the most efficient treatment. First of all, however, it must ask the opinion of the doctor in charge, when this is possible without injury to the patient. The speaker held that the best way to meet these requirements and especially the last, would be to send the doctor in charge short lists of printed questions in regard to whether it be necessary to undertake the treatment and how the case should be conducted. These lists of questions should be sent to the presidential bureau of each section and from thence immediately to the confidential doctor of the association. In 1910 the Posen Agricultural Association contributed to the treatment of sufferers from accidents, during the period of investigation

834 cases, a total amount of 85,349 marks, while the remaining 47 agricultural associations together only contributed in 2,913 cases a total amount of 193,911 marks. And he explained the number of cases in which the Posen Association contributed, so large in comparison with that of those in which the other associations did, by attributing it to the simplicity of the procedure of the Posen Association, on account of which the patients rarely refuse to accept the system of treatment prescribed. He, however, certainly held small hospitals preferable, on the addition of course that they are furnished with the most necessary clinical equipment, to large hospitals which are also often remote from the place of accident. He drew attention also to the need of obviating the danger of hospitals sending home the patients too soon, so that on return to an unhealthy environment often the benefits of the treatment are lost, and he described the agreements entered into with regard to this between the Professional Agricultural Association and the Breslau Accident Hospital. He then pointed to a difficulty often met with, which has not to have been contemplated in the Instructions issued by the Imperial Insurance Bureau, namely, that the employer often, immediately after the accident, occupies himself with the treatment of the sufferer, without advising the association, and only after the patient is sent home sends in the account for his expenses. Herr Noetel thinks that in these cases the association should refuse its assistance. Endorsing the views expressed by Dr. Grosse as to the importance of first aid, he mentioned that in the province of Posen alone the Professional Agricultural Insurance Association has founded 100 rural nursing homes. The association subsidises them on condition of their binding themselves to provide first aid in cases of accident before the doctor arrives.

Government Privy Councillor *Radtke*, Sectional President in the Imperial Insurance Bureau, spoke next. He congratulated the presenters of the reports on their contribution to the solution of this serious problem, and declared that the Imperial Office in issuing its special instructions to the agricultural and forestry professional associations will certainly bear in mind the experiences of the associations.

Privy Councillor *Schroeder* spoke last in reply to the remark of Mr. Schroeter with regard to the right of agricultural associations to threaten the victims of accidents who refuse to follow the doctors' prescriptions with a reduction of their compensation. He observed that even if this right be admitted, in practice the result will be the same, for while the necessary steps are being taken to enforce it, the time most suitable for effecting the cure will be lost. He then reaffirmed his view in opposition to that of Dr. Stahl as to the advisability of the associations having a confidential doctor for the presidential office of each section. According to him, a doctor for each section could examine the reports of accidents more promptly and more carefully than a single doctor attached to the presidential office of the association.

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2. — *Gardeners' Insurance.*

The second question proposed for discussion was whether it was advisable or not that the gardeners should withdraw from the professional agricultural associations to form an independent gardening association for all Northern Germany. Government Privy Councillor *Schroeder* presented a report, communicating the results of an enquiry carried out by him with the object of learning the opinion of the separate associations on the matter. It results from this inquiry that of 48 professional agricultural associations, 11 pronounced themselves against the withdrawal of the gardeners, while 30 were unreservedly in favour of it; 2 had not yet given their opinion, and 5 declared themselves in favour of the withdrawal under certain conditions. Dr. *Schroeder* was against the idea of the gardeners continuing to belong to the professional agricultural associations in South Germany, while in North Germany they contemplate the formation of an independent association: he held that they should either continue in or withdraw from all the agricultural associations with no distinction between North and South Germany.

On the opening of the debate, Councillor Dr. *Schroeder* moved a resolution to the effect that if an independent gardeners' association was formed, all engaged in the maintenance of cemeteries and not only those working in cemetery gardens should cease to belong to the professional agricultural associations. Government Councillor *Noetel* supported the resolution, expressing his hope that the question of the participation of particular groups in the agricultural or the gardeners' associations might be settled between them by common accord (1).

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3. — *Representation of the Professional Agricultural Associations.*

The question of the Representation of Professional Agricultural Associations at the Superior Insurance Offices was also rapidly dealt with by the Congress.

The report was presented by the Superior Government Council *Eigner*. As the Imperial Order on Insurance has greatly limited

(1) The rules of the new Gardeners' Professional Association were approved by Imperial Insurance Bureau, on November 27th., 1912.

right of appeal of the professional insurance societies and in many cases there is no appeal against the decisions of the superior insurance offices, so it is now more to the interest of the professional associations to be well represented in questions that come up for the decision of these authorities than it was in the past. Section 1,677 of the Imperial Order lays down that matters relating to accident insurance shall come within the competence of the superior insurance office for the district in which the party insured resides or works at the date the appeal is presented. Therefore it may happen that a superior office at a very great distance from the headquarters of the associations may have to judge a case and then the proceeding may be very costly. To remove such inconvenience, the report proposed that the professional agricultural associations should bind themselves mutually to represent each other at the Superior Insurance Offices.

Councillors *Drs Dreschler* and *Steinbach* observed that the right of the association to refuse this representation must, however, be recognised, while Government Privy Councillor *Notel* added that the expenses of the trials should be shared. The presenter of the report agreed to this, and reminded the first two of these speakers that as representative the association must conduct itself in the same way as if in an appeal on its own account, so that if a professional association is not as a rule represented at the Superior Insurance Office, it will be authorized to refuse the representation of another professional association. Councillor *Hoefer* considered this solution practical; there are many cases in which representation at the sessions of a Superior Office would lead to an expense out of proportion to the advantages to be derived, and in such cases it is clear that it is not to the interest of an association to represent another. Government Privy Councillor *Bichmann* reported that, in the Grand Duchy of Hesse, the Insurance Office has voted that the professional associations should always be regularly represented in disputes brought before the authorities for decision, since, especially in autumn, in a single sitting many important questions in connection with accident insurance are decided. However, the Conference approved the resolution of the presenter of the report, in favour of optional mutual representation.

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4. — Confidential Agents of the Associations.

The Superior Government Privy Councillor *Jung* presented a report as the most advisable means of defining the *Duties of the Confidential Agents of the Professional Agricultural Associations*. Out of 48 professional agricultural associations only 27 have confidential agents and from an enquiry carried out by Herr *Jung* it appears that opinions differ consid-

erably as to the advantage of the services they render, whether in examining into the accidents or supervising the application of preventive measures. Some associations hold that a confidential agent should be appointed in every commune; others, however, are disposed to assign them larger districts.

Merr Jung, therefore, held it impossible to establish uniform rules for all the associations and considered it better to leave every association power to establish in its rules the duties of its confidential agents according as seems to it best. He observed, however, that, under special conditions, the work of the confidential agents as representing the associations in suits before the higher offices has been useful, as it has been their general action in successive inquiries into accidents, as into the conditions of the victims. But according to him their work has not been so useful in regard to the application of measures for the prevention of accidents and the classification of farms. None of the members of the congress desired to speak on this item of the agenda.

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5. — *The Investment of the Capital of the Associations in Undertakings for the Encouragement of Co-operative Personal Credit.*

After the proposal to found a *Central Institute* for the Grant of Credit to Agricultural Professional Associations and the Receipt of their Deposits had been rejected on the ground that the mortgage bank already meet the need, the Conference passed to the consideration of the subject of the *Investment of a Portion of the Capital of the Associations in Undertakings for the Encouragement of the Co-operative Personal Credit of the Members of these Associations*. Superior Government Privy Councillor Jung presented the report; in his opinion the matter was of small importance for the agricultural associations, since in terms of §§ 718 and 719 of the Order of the Imperial Insurance Bureau, only a small portion of the capital of the Associations may be invested in this way. Further he considered that the individual members and associations can not borrow from them but the right is limited to federations of associations, since only a federation has authority to control the work of a single association.

Government Superior Privy Councillor *Dr. Kaufmann*, President of the Imperial Insurance Bureau, was present at the second sitting. He stated the pleasure he had in attending for the first time a conference of professional agricultural associations and thus having an opportunity of saying how much he appreciated the work they are doing in such self sacrificing spirit and for such high humanitarian ends. Although much has already been done to promote thrift among the agricultural

bourers, still the work of the associations is not yet terminated. We must especially, continued *Dr. Kaufmann*, supplement insurance by prevention. It is further to be regretted in this connection that the farmers, on account of their firm attachment to tradition, whether through want of confidence in technical inventions or through wrong ideas of economy or other reasons, do not yet sufficiently appreciate the great importance of the prevention of accidents.

Many think they will promote the interests of insurance against agricultural accidents, by reducing the preventive measures to a minimum, but they should keep in mind that the prevention of accidents is an essential condition of the diminution of the burdens the professional agricultural associations have to bear. The expenditure on preventive measures must be considered a profitable investment of capital, in the sense that it is largely compensated for by a decrease in the amount of the pensions paid. The experience of the industrial professional associations confirms this: thanks to efficacious preventive measures some kinds of accidents either no longer occur or their number is greatly reduced.

And also the consequences of accidents are becoming less serious. Account must then be taken of the fact that the application of these preventive measures is far more simple and less costly in agriculture than in manufactures. The example of a few agricultural associations shows that even in agriculture the systematic application of preventive measures is possible as well as profitable; if the other associations imitate them, the Munich Conference will have produced an excellent result.

Dr. Kaufmann ended his speech with the hope that the German employers may in the future always continue their beneficent work, in behalf of workmen's insurance, inspired, as it is, by a sense of duty. All those called upon to co-operate in this great social work must be aware that the palm of victory in the contest between the various nations will remain with that one that can obtain the best results in the struggle against human misery and has established the most efficacious protection for the poor and the suffering.

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6. — Election Procedure.

The next subject on the agenda was in connection with the *Procedure in Elections to Offices in the Professional Agricultural Associations*. The Government Superior Privy Councillor *Eigner*, who presented a report, spoke of the orders on the subject recently issued by the Imperial Insurance Bureau and proposed to answer the question which of the various electoral systems were best adapted to the professional agri-

cultural associations. Section 15 of the Imperial Order on Insurance lays it down that "the representatives of the landowners and employers and of the parties insured must be elected on the system of proportional representation". But this expression includes a whole group of election systems: elections of individual candidates or of a list, and list systems in their turn divided, according as the lists are closed or open.

The speaker expressed himself decidedly opposed to the system of proportional representation, as proposed in the Order on Insurance and after a detailed criticism of the system, he proposed a resolution inviting the meeting to declare itself against the new system, as unsuitable for the purpose, too complicated and not corresponding with the requirements of the professional agricultural associations.

Government Privy Councillor *Radtke*, Sectional President in the Imperial Insurance Bureau, replied, that it was not the fault of the Bureau nor of the Home Office that the Imperial Order on Insurance has enjoined the system of proportional representation.

The Imperial Bureau had to prepare a model of election procedure adapted to all systems, so that every association might choose whichever of the systems of proportional representation seemed to it most suitable. He then answered the various criticisms of Herr Eigner on the details of the proposed procedure.

Dr. Kaufmann, President of the Imperial Bureau, supported Herr Radtke, but at the same time recognised that there was no reason to change the election system in use up to the present and offered no opposition to the resolution proposed by Herr Eigner, which would serve to show Parliament what was the opinion of the agricultural associations in the matter.

After some further observations by the Privy Councillor *Andra* and Government Privy Councillor *Noetel*, the Permanent Commission was instructed to formulate a definite resolution, taking into consideration the proposals of Privy Councillor Noetel, so as to emphasize the fact that there is no need to introduce the system of proportional representation in the professional agricultural associations and that the system now prescribed is in itself both unsuitable and unpracticable.

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7. The Prevention of Accidents in the Application of Electricity.

The Measures for Prevention of Accidents in the Application of Electricity on farms next formed the subject of a long debate. We shall leave aside the considerations of technical character, and only deal with the economic side of the problem. Government Privy Councillor Noetel presented a report on the matter. The Imperial Insurance Bureau has

ged the agricultural associations, in its Circular of March 5th., to prepare a list of measures for the prevention of accidents in the application of electricity, and, in answer to the invitation, the Permanent Commission of the Agricultural Professional Associations, after agreement came to with the industrial associations, the Imperial Insurance Bureau, and the electro-technical associations, presented to the Munich Conference a plan for the regulation of preventive measures.

The agricultural accidents produced by electricity have been up to the present few in number since the farmer only uses for his work currents of less than 250 volts, not exposing the men to any special danger, and only in the case of some electric threshing or ploughing machines it is necessary to have recourse to 750 volt current. Meanwhile the rural electric central societies are generally formed and worked by large electric firms that apply the preventive measures suggested by experience against accidents. But it cannot be allowed that this state of things should continue, when we consider the present extension of the application of electrical energy to agriculture. Therefore, it has seemed advisable that the agricultural associations should make regulations for the prevention of this class of accidents.

The Commission, however, held that the regulation of the production of electrical energy and its distribution at high tension should not be included. In fact, it is extremely seldom that the farmer, who has, for example, a waterfall at his disposal, produces electrical energy for his own or his neighbours' farms; production of electric current for one's own account is always more expensive than connection with a central electrical society already in existence and the purchase of the necessary supply from it. Similarly, the distribution of high tension currents is a rule included in the ordinary work of large electrical firms, and not of individual farmers and hence it is for the industrial professional associations to establish the measures to be taken to prevent accidents in this connection. The speaker hoped that the Conference would adopt the measures proposed by the Commission, without so much difficulty there was in the case of those for the prevention of accidents caused by agricultural machinery.

Councillor *Hoefer*, in his report on a memorial of the Engineer *Metze* and the Saxon Chamber of Agriculture, taking account of the importance of a more extensive utilisation of electricity in agriculture and especially of the co-operative central electric power societies, observed that the preventive measures proposed by the Commission were not suited to the conditions of Saxony, as they impose too many burdens, and if they were applied the cost of installation of the central societies would be considerably increased.

Government Privy Councillor *Dr. Schroeder* and Prof. *Dr. Hartmann*, Engineer and Sectional President in the Imperial Insurance Bureau, called Councillor *Hoefer's* attention to the desirability of uniform rules for prevention for the whole of Germany, because only in this way can the co-operation of the manufacturers of electrical machines

be assured, as they will be careful to conform to the principles established by common consent of all the professional associations. Councilor Dr. Schwabert of Breslau observed that in Silesia the small agricultural businesses for the supply of electric power to which the rules put forward by the Commission would not apply are numerous enough. Still he accepted the conclusions of the report. Then the various articles of the proposed scheme in accordance with which each professional association must establish its own rules, were submitted for discussion and approval.

* *

7. — *Revision of the Rules for the Prevention of Accidents.*

The Conference then passed to the discussion of a theme of much more general interest, the *Revision of the Rules for the Prevention of Accidents already established by the Permanent Commission*. Herr Nodd, who was charged to report mentioned that already some years ago the Permanent Commission had shown the association the necessity of amending the rules for prevention established in 1895; but after the coming into operation of the Imperial Order on Insurance, the Imperial Office itself dealt with the matter and, in its Circular of March 20th., 1912 to the professional agricultural associations, it pointed out some details of the preventive regulations that especially required to be amended. The Conference had now to decide in reference to these. The speaker remarks on the aversion of the farmers for the whole group of preventive measures, on account of every farm being subjected to strict supervision on the part of the association. However, it must be observed that the number of accidents has constantly decreased in recent years, which proves the efficacy of the preventive measures, and he adduced, in confirmation of this, certain statistics of the agricultural and professional associations of Silesia and Posen. For example, in the latter the number of accidents for which compensation had to be paid was 2,072 in 1907, 1,919 in 1908, 1,859 in 1909, 1,664 in 1910, and only 1,547 in 1911 and it was in 1907 that the Posen Association began to entrust the supervision of the application of the preventive measures to technical employees. However, experience shows that some of the provisions in the regulations in force are difficult to apply; further it must be kept in mind that §§ 1,030 and 857 of the Imperial Order on Insurance lay down that the professional agricultural associations are obliged annually to summon representatives of the persons insured to examine the report of the technical inspectors and to take what steps seem best to amend the provisions for the prevention of accidents. It therefore seemed to the speaker that a complete and systematic revision of the rules

it was advisable. An enquiry will therefore be held into the results obtained by the preventive measures in the case of individual associations, and the results of this enquiry will be laid before the next reference of the associations.

The Conference accepted the report and proceeded to the discussion of the various subjects in this item of the agenda.

The first speaker on the subject of the *Establishment of Uniform provisions for the Prevention of Accidents in connection with Agricultural machinery and the Carrying out of the same by all Agricultural Professional Insurance Association*, was the President of the Conference, Superior Government Counciller *Wissing*, Representative of the Association of Upper Bavaria.

He told the meeting that the Bavarian associations have the intention of instituting uniform regulations for the prevention of agricultural accidents in all Bavaria; however, the work of the associations must be enforced by a law expressly forbidding manufacturers of agricultural machinery selling machines not supplied with the safety gear prescribed by the preventive regulations. The Bavarian Chamber of Deputies has already pronounced in favour of such a law; for the complete attainment of the object a State law, however, is not enough, but an Imperial law is wanted, otherwise the competition of factories in States where this law is not in force, as such factories will be able to sell their machines cheap, will become dangerous for the others.

Herr *Noel* endorsed the remarks of the preceding speaker, adding that the first condition for obtaining a uniform law for the whole Empire on the subject of prevention of accidents in connection with agricultural machinery is uniformity in the regulations of the various professional associations in reference to prevention. There are still some associations, for example, in Württemberg, that have no regulations on the subject: others have, but they differ extremely from those of neighbouring associations. For example, the Posen Association orders that machine reapers be supplied with safety gearing, while the neighbouring Association of Silesia limits itself to prescribing breaks, which the technical inspectors of the Posen Association describe as dangerous. Certainly it is difficult to lay down rules applicable to all the 48 agricultural associations, but the difficulties are not insurmountable: while the advantages of uniform regulations are evident.

In the debate, *Dr Drechsler*, Councillor of the Treasury, while accepting the conclusions of the reports observed that the essential thing is to simplify the preventive regulations in force, so as to render them clear and intelligible even to the small farmer. *Dr Hartmann*, Engineer, observed that while it would be difficult to establish uniform rules for the whole Empire in regard to rural building—in view of the great diversity in the systems of building in different parts of the country—on the other hand, such difficulty does not exist in the case of agricultural machinery, as everywhere the same system prevails with regard to the manufacture and employment of machinery.

The President of the Imperial Insurance Bureau, *Dr Kaufmann*, again drew *Dr Drechsler's* attention to the importance of preventive measures, adding that there must be no exaggeration; the small farmer will at most have a threshing machine and hence the precautions he will have to take will be few and simple.

After a few remarks from Councillor *Dr Hoefer*, and Baron von *Velsen*, the proposal of Herr Noetel was approved, to the effect that the Permanent Commission prepare uniform rules on the matter of safety gear for agricultural machines.

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With regard to the *Rules for Prevention of Accidents in Industries Auxiliary to Agriculture, which cannot be Registered with a Professional Agricultural Association*, Herr Noetel, who had been charged to report, mentioned that the Circular of the Imperial Insurance Bureau of March 20th, 1912, lays it down that these industries should be subject to the rules of that professional industrial association to which they would belong if they were not auxiliary to agriculture. But he questioned the practicability of this provision, since the agricultural associations are not in a position to supervise the application of industrial regulations. These may also contain provisions not consonant with those prescribed for agriculture; it is therefore well that the permanent commission of the agricultural association should first examine, in each case, whether the industrial regulations apply to industries auxiliary to agriculture. The same should hold in respect to preventive measures in the case of building, when this is not for industrial purposes (for example repairs to a farm house) and the keeping of draught cattle or the maintenance of means of transport, which also are not employments of industrial character.

With regard to the *Publication in Foreign Languages of the Rules for the Prevention of Accidents*, Herr Noetel, in his report, mentioned § 848 of the Imperial Insurance Order, in terms of which, if workmen ignorant of German are engaged in an undertaking and those speaking one foreign language are at least twenty five in number, the preventive regulations must also be published in such foreign language.

The Prussian Minister of Agriculture, in a Circular of March 5th., 1912 recommended the due application of this principle, which, especially in districts where various languages are spoken, is a guarantee of the principle of nationality. Herr Noetel further added that, in his opinion the best means for making known these preventive rules to the workmen ignorant of German is to instruct them verbally in the matter and expressed his opinion that the principles embodied in the Imperial

must not be too literally interpreted but the individual associations should be left freedom of initiative.

Dr Kaufmann agreed with the previous speaker: § 848, par. 4 is only practical importance when the number of the workmen ignorant of German is more than twenty five; in any case it is well that the regulations should provide also for these cases.

Baron von *Richthofen* showed the importance of the matter. In Silesia, for example, there are 569 farms on in which more than 25 workmen are engaged, who do not speak German, but various other languages, Russian, Polish, Ruthenian.

Dr Kaufmann observed that even the industrial professional associations have adopted a similar rule: of course it must be left to the individual employer to decide if these preventive measures should be made known verbally or in writing. The Permanent Commission of the agricultural associations will report on the matter in the course of the year 1913.

So again in 1913 the Commission would have to proceed to a revision of the preventive measures, as far as concerns that class of farms on which the prescribed preventive measures have not been adopted, since, according to the recent Imperial Order, the professional association has no longer the right to place these farms in a special class of higher risks and make them pay supplementary contributions; this is recognised to be ineffectual and inequitable.

With regard to the *Duties of the Technical Inspectors*, Herr *Noetzel* states that § 875 of the Imperial Order, like § 125 of the law of 1909 states that the professional associations are authorized and, on request of the Imperial Insurance Bureau, are obliged, to have technical inspectors to supervise the application of the preventive measures and to study the conduct of the business of the individual farms so as to judge what they should belong to the association or not and in what class of farms they should be registered.

The speaker held that it is in the interest of the associations to provide for the good working of this service. Perhaps one inspector is sufficient for each district of a superior insurance office, so the large agricultural associations will only require two or three. Small associations must arrange, by forming a federation or entering into agreements with a large one, so that its technical employee may also supervise the related societies. The speaker then enlarged on the importance of good technical and practical preparation for these employees.

Dr Kaufmann held that the persons best fitted for this work of inspection are employees who have come from agricultural schools. They have not only to inspect individual farms, but also to make the farmers understand by means of lectures, practical lessons, etc., the importance of the prevention of accidents. *Dr Kaufmann* declared himself opposed to uniformity: this service can not be organized on uniform lines for the whole Empire, but account must be taken of the local conditions. Thus, in some countries, the work of these employees may be

completed by the police or gendarmes; and not in others; but these references are of small importance; the essential is that the application of the rules for the prevention of accidents be methodically supervised by experts.

Counciller *Noetel* presented a report on the way in which the employer may exert the right, granted to him by the Imperial Order on Insurance, to transfer the charges imposed on him by the regulations for prevention to the manager of the farm, to special inspectors or to other employees. While Herr Noetel held that in this case the employer is obliged to advise the association in writing, *Dr. Kaufmann*, on the other hand, considered it would be sufficient to present to the technical inspector of the association, on request, a deed in writing duly signed by the parties concerned.

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9. — Rules for the Prevention of Accidents and Police Regulations

The subject of the *Rules for Prevention of Accidents in relation to Police Regulations* gave occasion for more ample discussion.

Herr *Noetel* mentioned that the Prussian Home Office, in a recent Circular, showed the necessity of harmonising the rules for prevention of accidents issued by agricultural professional associations with the police regulations for the prevention of accidents. There are still provisions in which these police regulations are in open contradiction with the rules of the associations and the farmer runs the risk, of double punishment by the association and by the police, if he infringes the regulations. The Prussian Minister's Circular declares that the co-operation of the gendarmes in the work of preventing agricultural accidents does not depend on special police orders, but is part of their ordinary duty. And Herr Noetel affirmed that generally in the province of Posen the inspection of the insured farms, carried out by the gendarmes, has up to the present given excellent results.

As the preventive rules of the associations do not take into consideration all the details of agricultural business and their application is not everywhere perfectly supervised, the Prussian Minister holds that the existing police regulations on the matter must be maintained; in any case the Minister's Circular is important, because in it for the first time there is a suggestion of collaboration between the authorities and agricultural professional associations.

Prof. *Dr. Hartmann*, Engineer, held that the want of harmony presently existing between the police regulations and the rules for prevention might cease, if, in the preparation of new preventive rules, for the use of agricultural machinery, account be taken of the wishes of

orities. Councillor *Meyer*, Representative of the Agricultural Association of East Prussia, held that the police have shown themselves best not only to inspect the application of the preventive measures, but to classify the insured farms.

The President of the Congress, *Wissing*, Superior Government, Councilor, was of the contrary opinion at least as far as concerns Bavaria, where the farmer is far more sensitive in the matter, and would almost consider the inspection made by the gendarmes as an infringement of liberty.

Dr Schroeder and Councillor *Andrà* spoke to the same effect, maintaining that only technical inspectors of the associations can accomplish work of inspection and supervision.

Dr Kaufmann also pointed out that a system of supervision might be one province and be inapplicable in another; account must indeed be taken of the various economic and political conditions of the country.

Mr Noetel concurred in this, expressing the hope that in the future prevention of agricultural accidents might be regulated only in accordance with the rules laid down by the professional associations.

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After some communications from members on ordinary business matters, the President of the Meeting, *Herr Wissing*, thanked those present for their attendance, expressing the hope that they would remember with pleasure both the city of Munich and the Congress of 1912. *Dr Kaufmann* interpreting the sentiments of the Congressists pressed their warm thanks to the President for his courteous and impartial direction of the work of the Congress; he hoped to be able for a few more years to contribute to the accomplishment of the great task the legislature has assigned to the professional associations and the Central Insurance Bureau. The same sentiments were expressed by the Representative of the Posen Association, *Von Heyking*, speaking in the name of all the professional associations.

2. PUBLICATIONS OF RECENT DATE ON AGRICULTURAL INSURANCE IN GERMANY.

OFFICIAL PUBLICATIONS:

- FERSENMAIER (A., Regierungsrat): Das Viehversicherungsgesetz nebst den Vollzugschriften (Amtliche Ausgabe). (*Law on Insurance of Livestock, with the Execution Regulations. Official Edition*). Karlsruhe (Macklot) 1912.
- HEILBERHANDLUNG von Versicherten und Fürsorge für Invalide bei der Landesversicherungsanstalt der Hansestädte im Jahre 1911. (*Medical Treatment of the Insured and Medical Care of the Sick, in 1911, by the Insurance Institute of the Hanseatic Towns*). Lübeck, 1911.

OTHER PUBLICATIONS:

- Feuerversicherungskalender, Deutscher, für das Jahr 1913. (*German Fire Insurance Yearbook for 1913*). Published by Schäfer, Hanover, 1912.
- JAHRBERICHT des Vereins deutscher Viehversicherungsgesellschaften. (*Yearbook of the Federation of German Livestock Insurance Societies*). Perleberg, 1912.
- MOLDENHAUER: Internationale Fortschritte der Sozialversicherung. (*International Progress of Social Insurance*). Hanover, 1912.
- ROHRBECK (Walter, Dr. Phil., Dr. Jur.): Die Schätzungsgrundlagen bei Hagelschäden. (*Estimation of Damages caused by Hail*). Munich, Steinebach, 1912.
- SAMMLUNG von Versicherungsbedingungen deutscher Versicherungsanstalten. (*Collection of the Conditions for Insurance in German Insurance Institutes. Published by the German Society for the Study of Insurance*). Berlin, 1913.
- WEILANDT (Ernst): Die Feuerversicherung im Dienste der Landwirtschaft. (*Fire Insurance in relation to Agriculture*). Düsseldorf, 1912.
- ZAHN: Die Arbeiterversicherung in Deutschland, ihre sozialhygienische und sozialpolitische Bedeutung. (*Workmen's Insurance in Germany. Its Importance from the point of view of Health and Social Policy*). Extract from the Münchener Medizinischen Wochenschrift, Munich, 1912.

ITALY.

I. MISCELLANEOUS INFORMATION

1.—A BILL RELATING TO THE CONSTITUTION OF A "CONSORTIUM COMMUNES FOR INSURANCE AGAINST HAIL." — The Hon. Luigi Montanini, deputy for Stradella, recently presented to the Chamber bill for the constitution of a "Consortium of communes" for insurance against hail. We give the text *in extenso*:

"Art. 1. — The vine growing communes of the provinces of Alessandria, Cuneo, Pavia, Piacenza and Turin are authorised to unite to form a mutual insurance society, on the basis of a fixed premium, against damage from hail. The adhesion of a commune shall in each case be noted by a majority of the councillors provided that within one month from the publication of such resolution no objection shall be lodged by proprietors representing at least one-third of the vineyards included in the land of the commune. When the rules of the society have been drawn up by the representatives of the associated communes, and have received the sanction of the Superior Council of the Province, they will be approved by royal decree.

"Art. 2.—The communes, thus associated, may impose upon the proprietors of vineyards and land planted with vines an annual contribution to be fixed by rule and in no case to exceed 25 francs per hectare. This rate shall be collected by the agent of the commune with the same formal privileges and the same commissions as for other taxes.

"Art. 3.—Until the completion of the new land survey in the above-mentioned provinces the Ministry of Finance may consolidate in the form of an annual grant to the society, the average of the sums distributed every year by the Treasury to the provinces as compensation for damage caused by hail."

Considering the interest of the subject it may be desirable to indicate the chief points embodied in the rules drawn up by the Consortium.

The Consortium constituted among the communes of the five provinces above-mentioned or by the proprietors of vineyards in communes not belonging to it, will be managed by an assembly of the mayors or the delegates from the associated communes, and its executive body will be the *deputation of the consortium*. It shall work with funds derived from

the contributions of the communes or associated groups. These contributions and all claims for damages shall be paid in the following manner :

In each commune during January of each year a municipal commission shall compile the list of proprietors of vineyards and of lands planted with vines and eventually of other lands, separating them in four classes :

- (a) vineyards under intensive cultivation on hill-sides ;
- (b) vineyards under intensive cultivation on level ground ;
- (c) vineyards with other crops between the vines on hill-sides
- (d) vineyards with other crops between the vines on level ground

This list, with the quota to be paid by each proprietor, fixed in the way about to be described, shall be posted for public inspection during the whole of February, and any person interested may appeal against it, first, before the commission and afterwards, before the communal council which shall deliberate on appeals during the month of April.

At the end of April the final list shall be delivered to the *deputa of the consortium*, which shall be guided by it in deciding as to compensation for damages. The annual insurance premium to be paid by each contributor is fixed on the following scale :

for vineyards of Class A, 10 francs per hectare			
»	»	»	B, 7 » » »
»	»	»	C, 6 » » »
»	»	»	D, 3 » » »

The deputation shall also consider the desirability of re-insuring either the whole or a part of the risks undertaken. The extent of the damage caused by hail shall be ascertained through visits paid by a special commission composed of an expert who is a member of the Consortium, the director of the local itinerant lectureship, and two vine-growers experts. The cost of the estimate shall be paid by the Consortium.

The claims in each year shall, after deducting the expenses of administration, be paid out of sums received during the course of that year levied on the above mentioned scale and should these not suffice to pay eight-tenths of the damage, the reserve fund may be drawn upon to the extent of one-fourth of its amount in that year. Should a part of the eight tenths still remain unpaid, each indemnity must be reduced *pro rata*. No account will be taken of damage caused by hail which is less than 10 % of the value of the crop.

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2.—RULES FOR THE CONSTITUTION AND WORKING OF CATHOLIC SOCIETIES FOR THE MUTUAL INSURANCE OF CATTLE, AND FOR DISTRICT FEDERATIONS. — In the Bulletins for March and July 1911, we described

the organisation of the *Unione Economico-Sociale per i Cattolici Italiani* (Bergamo), based on its new rules which came into force on the 1st of the same year. It was then shown that the Union through its new rules is now formed of four general departments; (a) for professional organisation; (b) for co-operative societies and agricultural institutions; (c) for credit institutions; (d) for prudential and mutual societies. To this last is committed the chief direction of the co-operative activity of Italian Catholics in each district, and more especially the duty of promoting through suitable local organs the establishment of co-operative insurance societies and their grouping in federations. With this object, the bulletin of the Union, "*L'Aziende Sociale*" (Bergamo, No 10, 1912) publishes model rules for mutual cattle insurance societies with a schedule of the more general forms of policy and model rules for district federations at which we shall glance briefly. For individual mutual societies the rules provide that they shall grant compensation for the death of an animal through disease or accident within the limits of a commune. They must also arrange for the diffusion among the associates of a knowledge of cattle-raising with the object of improving the treatment of animals and diminishing mortality among them.

The insurance must be effected according to certain rules and conditions which may be summarised as follows:

First the contract must be drawn up in writing in the form of a special policy granted by the society. To make it valid, the insured persons must:

(a) present animals perfectly sound and bearing a distinctive mark;

(b) if the animals have been purchased, be furnished with the usual legal warranty as to soundness with the right of proving and seeking (article 1,505 of the Italian civil code);

(c) keep the animals well fed;

(d) maintain clean and in good sanitary condition all stables and sheds — the association reserving the right of inspecting such insured buildings at any time and to verify the sanitary conditions and also to suggest improved methods in breeding and rearing cattle;

(e) avail themselves, when necessary, of the services of qualified veterinary surgeons;

(f) select for insurance cattle not less than six months old nor more than twelve years.

During the summers in the mountains insurance is suspended, and may again come into force on the return of the animal after examination by a veterinary at the cost of the society. For loss through fire or lightning compensation will be made, but not for that arising out of war or total or partial occupation by a military force for any reason, or for damages caused by invasion, tumult, earthquake, inundations or other act of God, nor for contagious cattle disease.

The contract, except in special cases, is understood as being made for five years, and the policy is renewed for the same period until repudiated by one of the contracting parties at least three months previously. A person insured for a longer period or by a contract renewable in virtue of a tacit extension, must before January 1st each year give notice of the cattle he proposes to insure and deposit the requisite amount.

This must be paid in ready money, at a rate per cent of the capital insured, established according to a tariff framed annually by the administrative Council. The premium must be paid on taking out the policy and on any subsequent modification of it due to an increase of the numbers of animals insured, and afterwards annually at fixed periods for the duration of the policy. The person insured is exempt from any government tax, or other charge in connection with the policy.

The association pays the cost of management with sums deducted from the quota for insurance. Compensation for all loss or injury will be provided for by the premiums paid, by the sum realised by the sale of the carcasses of the injured animals, by the repayments on re-insured casualties, or out of the reserve fund. Should these means be insufficient the Council may fix a supplementary rate which must never exceed half the ordinary rate. And should even this prove insufficient, the claims must be reduced in proportion, without, however, giving the person insured any claim on future transactions or on the directors of the society. When the costs and the amount of compensation for casualties have been deducted, the sum remaining must be paid into the reserve fund.

According to statutes of this kind, as soon as an animal shows signs of disease notice must be given to the mutual society together with a report on the illness by a veterinary surgeon. The society must then order the sale, slaughter or isolation of the animal which is infected or suspected. If the animal should die, the insured person must inform the association, even though he may have previously given notice of the disease, and he must have the carcass bled according to the usual rules, at his own expense.

When the animal has died or been slaughtered the mutual society shall have the carcass valued at its own expense according to current prices, and according to the value of the animal previous to illness or accident. Should the insured person not be willing to accept this decision, he may ask for a second to be given by persons representing both sides, from which there will be no appeal. The association shall sell for its own benefit the carcasses of animals which have died or been slaughtered, if pronounced to be saleable or eatable. Otherwise the insured person must provide at his own expense for burial and disinfection.

Should he not comply with these conditions he shall, according to circumstances, incur loss of his right to compensation, or shall have to pay a fine.

Of associations thus constituted all may be members who possess title in the district if they can give guarantees of honesty and neither try on a trade in cattle nor insure them in other offices.

After due consideration the council of administration may expel from association any member:

- (a) who does not attend to cleanliness;
- (b) who does not take due care of insured animals;
- (c) who does not attend carefully to the prescriptions of the veterinary;
- (d) who refuses to carry out prophylactic vaccination;
- (e) whose payments have been in arrears for eleven months;
- (f) who attempts to defraud or bribe;
- (g) who disobeys the statutes;
- (h) whose conduct is in any way unworthy of a member of the association.

The council, composed of seven members elected by the general assembly of associates meets once a year and in addition to transacting the ordinary business of the society, must exercise continual vigilance over insured animals, and their treatment when ill, inspect stables, etc., and compile statistics of mortality among cattle in accordance with the instructions of the local federation.

The federation is intended to unite the local mutual societies and according to its rules its objects are as follows:

- (a) the collective representation of federated mutual societies;
- (b) the development of moral and economic solidarity among the local mutual societies;
- (c) the collection of statistics of mortality among cattle in order to fix the tariff of insurance;
- (d) the defence and protection of the rights and interests of the society;
- (e) the organisation and objects of inspection and of courses of instruction;
- (f) assistance and advice to federated mutual societies;
- (g) re-insurance of federated societies, prescribing the necessary conditions, or the facilitating of re-insurance by fixing the maximum risk to be undertaken by the local mutual societies.
- (h) propaganda by means of articles, pamphlets and lectures.

Federations similar to those above described may, if necessary, divide themselves into sections, the functions delegated being in each case defined by a resolution of the federation.

They will be legally constituted as co-operative limited liability companies with unlimited capital the shares being of 25 francs, in the hands of the holder. At the time of purchase, one-tenth of the amount of the shares must be paid in cash, the rest on the demand of the council of administration. Every member must purchase at least one share, but no members may hold more than fifty. All profits for the first five years go to the reserve fund; after which 25 per

cent will be sufficient, and the rest shall increase the dividends of the shareholders, but in such a way that no one shall receive more than four per cent on the paid-up value of his shares. Should there be a residue it shall go to the reserve fund.

In case of the dissolution of a federation, the net profit remaining after liquidation shall be divided among the affiliated societies in proportion to the shares they hold.

Local federations, organised as above described, must join the Italian Federation of Mutual Insurance against Mortality in Cities, which, in its turn, is united to the General Office of Prudential and Mutual Aid Societies, an integral part of the Economico-Social Union for Italian Catholics.

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3. — THE PROGRAMME OF THE ITALIAN FEDERATION OF MUTUAL AID SOCIETIES FOR 1913. — On November 17th., 1912 the delegates from the Italian Federation of Mutual Aid Societies met at Milan. The Secretary General, Signor Antonio Vergnanini, described the programme of work for the current year of which the following is an outline:

1. The organisation and progressive development in all parts of Italy within limits to be laid down according to circumstances, of a network of permanent offices in direct touch with other organisations and with the working population, in order to give unity of aim and action to the movement of co-operation and mutual aid, and to put an end to the existing conditions of isolation and independence.

These offices will be for propaganda, supervision, technical, administrative and financial assistance, and the system of organisation will be identical throughout.

The offices will be called "Prudential and Co-operative Lectureships" and will be under the direction of a central office at Milan in the premises of the League of Co-operative Societies, and the Federation of Mutual Societies.

2. Propaganda for the popularisation of State institutions for the promotion of thrift and for the protection of labour by entrusting the management, with the needful guarantees, to the working men concerned.

3. Inquiry into the resolutions and deliberations of those congresses of prudential and co-operative societies (1) not yet carried out or only partially carried out, with a view to ensuring the interest and support of the parliamentary group of friends of co-operation and to drawing up and promoting bills without delay. Among the more urgent needs are bills relating to the legal recognition of mutual societies, to co-operative farming, to unemployment, to credit to co-operative

(1) See *Bulletin* for Nov., 1912, page 51, and for Dec., 1912, page 89.

ve societies, to cheap housing, to taxes on savings and on increased
 me of shares.

4. Efforts to induce the government to take measures for the removal
 obstacles hindering the government itself, provinces, communes and
 suitable institutions from carrying out public works already plan-
 ed, and to bring the various departments into line to work for this
 object.

The above programme was unanimously approved by the meeting.

(From *Co-operazione italiana*, the organ of the above-mentioned Federation, Milan
 no. 1010, 23 Nov. 1912).

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4. — AN ITINERANT LECTURESHIP OF RURAL THRIFT AND CO-OPER-
 ation was officially inaugurated and constituted on November 24th., 1912
 Reggio Calabria, as a section of the National Committee of Agricultural
 co-operation for the South of Italy. According to its rules its ob-
 jects are:

(a) to conduct propaganda for the establishment of co-operative
 institutions of various kinds, and to encourage small proprietors,
 tenants, and especially peasants and agricultural labourers to become
 members of such institutions;

(b) to popularise the rules for the constitution and working of these
 institutions (mutual cattle insurance societies, societies for insurance
 against fire, hail and accidents, for the enrolling of members in the
 National Thrift Bank, and for educational purposes) exercising over all
 the necessary supervision and establishing federations for re-
 insurance.

(c) to diffuse, especially among tenants and small proprietors, a
 knowledge of hygiene in the breeding and rearing of cattle, and of the
 rules regarding co-operation and insurance.

The Lectureship will be extended to the three Calabrian provinces
 and to the Basilicata,

(From *La Mutualità Agraria*, Rome, No. 22, 15th. Dec., 1912).

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5. — RECENT MEETINGS DEALING WITH THE QUESTION OF MUTUALITY.
 In North Italy, towards the end of 1912, many meetings of mutual
 insurance companies were held. (1) One of these was convened by the
 National Mutual Fire Insurance Federation at Turin on November 10th.,

(1) From the 20th to the 22nd Oct. 1912 there was held also a national assembly, of
 manufacturers and representatives of institutions which insured against accidents "to con-
 sider modifications of the law of the 31st. Jan., 1904, and of the regulations of the
 16th. March, 1904, referring to accidents to workmen.

to make a formal application to government for the exemption from taxation of the sums which local mutual societies allocate to their reserve fund at the end of each working year.

Dr. Mario Casalini proposed a resolution calling on the Ministers of Agriculture and of Finance to introduce a bill in favour of mutual agricultural societies which should in the first place grant the desired exemption, and in the second simplify and regulate the constitution and working of these societies, determining their principal features and organising the institutions of supervision and reinsurance.

Another resolution was proposed by the engineer, Guido Mikelli, to encourage mutual fire insurance companies to unite in an insurance syndicate for mutual guarantee against the more serious risks, and to appoint a special commission to make the necessary inquiries.

At Piacenza another meeting was held under the auspices of the Humanitarian Society of Milan. A report having been read by Dr. Az. Cerlini, it was decided to form a provincial federation among the mutual aid societies of working men to encourage the mutual and co-operative movement in the provinces. The Hon. Giovanni Raineri then proposed a resolution to extend the benefits of the Maternity Savings Bank recently established so as to include all working women, and consequently those working in rice-fields. Finally Commendatore Paretti, director of the National Thrift Bank, dealt with the question of pensions for working people.

In another meeting held recently at Cremona a resolution was passed on the need for reform in the law relating to the legal recognition of mutual aid societies, and another resolution calling for the introduction of a bill to extend to agricultural labourers compulsory insurance against accidents, already in force for factory workers. (1)

Lastly, in a fourth meeting at Vimercate (Monza), Dr. Del Bo spoke on the subject of agricultural mutual cattle insurance, pointing out the economic importance of mutual cattle-insurance societies when their working is assured for a long period of years. He considered that the best kind of mutual insurance was that in which there is a fixed premium paid in advance in proportion to the value of the animals, thus avoiding the well known inconvenience of the system of a premium paid by instalments, and by making possible the formation of a reserve fund giving better security to the peasants. He also showed how mutual cattle insurance might contribute to the development and improvement of cattle raising and assist efforts to prevent diseases in cattle. Accordingly the following resolutions were passed:

(a) that new associations be constituted on the principle of a fixed premium paid in advance and that those working under the instalment premium system adopt this principle;

(b) that in every rural commune there be a mutual society organised as above;

⁽¹⁾ On the 7th. Nov. the establishment of a provincial federation among mutual societies was announced at Cremona.

(c) that the government, with the sums accruing from the tax on slaughter of calves now by a recent law (1) to be devoted to live stock improvement should give large grants to well organised mutual cattle-insurance companies to assist them in their efforts to improve breeds of cattle and check disease.

(From *La Mutualità Agraria*, organ of the National Committee of Agricultural Mutuality Rome, No. 20, 15th. Nov., 1912).

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6.—LEGAL CONSTITUTION OF THE NATIONAL FEDERATIONS FOR MUTUAL LIFE INSURANCE AND FOR FIRE INSURANCE. — In order better to attain their objects, and more especially to enable them to effect re-insurance, these two societies have obtained legal recognition. They have been founded for the following purposes :

(a) to encourage, in agreement with the National Committee of Mutuality, the formation of small local mutual societies grouped in district federations to help those already formed and those about to be formed ;

(b) to make provision, directly or indirectly, for assistance and education of the administration and finances of federated societies ;

(c) to compile statistics, publish reports and undertake any other preliminary work in connection with re-insurance ;

(d) to organise re-insurance.

The Federations will prepare the rules bye-laws, and books for federated societies, and undertake their protection and defence.

(From *La Mutualità Agraria*, Rome, No. 17, 1912).

PUBLICATIONS OF RECENT DATE ON AGRICULTURAL INSURANCE IN ITALY.

OFFICIAL PUBLICATIONS :

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SNACCHI (Luigi): La tutela legale e l'assicurazione per la maternità in Italia e all'estero. (Conferenza tenuta all'Associazione sanitaria milanese, il 13 Maggio 1912) (*Legal Guardianship and Maternity Insurance in Italy and Other Countries. Lecture delivered at the Milanese Health Association, May 13th., 1912*). Milan. V. Nugoli, 1912.

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ISTITO DELLA FEDERAZIONE regionale delle associazioni mutue assicuratrici contro la mortalità del bestiame (*Rules of the Regional Federation of Horned Cattle Mutual Insurance Associations*). In "Azione Sociale." Bergamo, No. 10, October, 1912.

ME E PROPOSTE al Convegno nazionale degli Industriali e degli Istituti esercenti l'assicurazione-infortuni, per lo studio delle modificazioni alla legge ed al regolamento infortuni, Roma. 20-22 ottobre, 1912. (*Subjects of Discussion and Proposals considered at the National Meeting of Industrials and Accident Insurance Institutes, for the Study of Amendments to the Law and the Executive Regulations, held in Rome, October 20th., 22nd., 1912*). Rome. Printed by E. Voghera, 1912.

Part III: Credit

AUSTRIA.

STATISTICS OF SAVINGS-BANKS FOR THE YEAR 1910.

SOURCES:

STATISTIK DER SPARKASSEN in den im Reichsrat vertretenen Königreichen und Ländern für das Jahr 1910. (*Statistics of Savings-banks in operation in the countries represented at the "Reichsrat" for the year 1910*). Statistics published by the „K.K. Statistische Kommission“. New Series, Vol. 7, 2nd. part, Vienna. Gerold, 1912, 4^o. pp. 38+93.

The importance of savings-banks in Austria is especially noteworthy in relation to the interests of agriculture, the greater part of the capital held by them in deposits being invested in mortgages. Moreover, some of these savings-banks have founded special branches dealing exclusively in loans on land values by means of the issue of bonds. These special branches are the ten following:

1. Pfandbriefenanstalt der Steiermärkischen Sparkasse, Gratz;
2. „ der Ersten Oesterreichischen Sparkasse, Vienna.
3. „ der Bukowinaer Sparkasse, Czernowitz;
4. „ der Ersten Mährischen Sparkasse, Brünn;
5. „ der Böhmisches Sparkasse, Prague;
6. „ der Allgemeinen Sparkasse und Leihanstalt, Linz;
7. „ der Gemeinde-Sparkasse, Gratz;
8. „ der Prager Städtischen Sparkasse, Prague;
9. „ der Sparkasse der Stadt, Innsbruck;
10. „ der Zentral-Sparkasse der Gemeinde, Vienna.

It is therefore interesting with regard to agriculturists to follow the development of savings-banks in Austria, to study the importance of the economic forces at their disposal, and to ascertain what proportion of their capital is invested in mortgage loans and more especially in operations of credit.

A recent important publication, the "*Archiv für Bodenkredit der Bayerischen Handelsbank zu München*" the work of Dr Fritz Schulte, director of the Archives and of the Statistical Office of the Bavarian Commercial Bank, gives much information about the work of these institutions in regard to land credit operations during the long period ranging from 1844 to 1910.

It is not, however, our intention to deal with the work of the special land credit institutions dependent on the savings-banks. Leaving this subject to another time, we will proceed to a brief examination of the general position of the Austrian savings-banks during the year 1910, as based on the Official Statistics published during the year 1912.

Number of Savings-banks. — At the end of the financial year 1910 the number of savings-banks amounted to 669, as against 655 in the preceding year. There were founded, therefore, 14 new banks, as compared with 5 founded in the previous year; 11 in 1908 and 14 in each of the years 1906 and 1907. Out of the 14 savings-banks opened in 1910, 4 were founded in Bohemia and 2 in Dalmatia and in Bukowine.

As shown in the following table, the 14 new savings-banks established in 1910 were either municipal (13 banks) or were organised by district authorities (1 bank); in no case was a bank founded by the co-operative associations (*Vereinssparkasse*).

Distribution of the Savings-banks according to character.

Category of Savings-banks	Number of Savings-banks		Variations
	1909	1910	
Municipal Savings-banks	540	553	+ 13
Co-operative Savings-banks	71	71	—
District Savings-banks	44	45	+ 1
Total	655	669	+ 14

Most of the Savings-banks are in Bohemia (240), in Moravia (88) or in Lower Austria (83). Taking area into consideration, in 1910, one savings-bank existed for every 448.44 square Km, and with regard to population, there was on an average one savings-bank for 42,702 inhabitants.

Rate of interest on deposits. — The Statistics before us present interesting data on the variations in the rate of interest paid to depositors in the year 1910, as compared with the preceding years.

The normal rate of interest (the rate which as a rule and in the absence of special fluctuations becomes established by each institution) between 1906 and 1901 showed a tendency to rise (from 3.88 % to 4.02 %).

fell in the four following years to 3.89 % in 1905, but, in 1906 it began to rise more and in the last financial year reached 4.04 %.

Of the 14 savings-banks founded in 1910, four fixed the normal rate interest on deposits at 4 %, four others at 4 $\frac{1}{4}$ %, three at 4 $\frac{1}{2}$ % and at 5 %. At the time of the publication of these Statistics two of the banks had not yet completed their balance.

During the last five years the savings-banks existing in each year could be divided as follows according to the normal rate of interest paid to the depositors.

Distribution of the Savingsbanks according to the normal rate of interest paid to depositors from 1906 to 1910.

Normal rate of interest (per cent)	Years				
	1906	1907	1908	1909	1910
1	1	—	—	—	—
1 $\frac{1}{8}$	34	18	11	10	7
1 $\frac{1}{10}$	24	12	3	3	2
1 $\frac{1}{10}$	9	1	2	2	2
1 $\frac{3}{4}$	132	71	53	56	53
1 $\frac{9}{10}$	11	3	2	1	2
1 $\frac{30}{100}$	—	—	1	1	—
1	369	458	498	498	505
1 $\frac{1}{8}$	—	—	—	—	1
1 $\frac{1}{10}$	—	—	1	1	1
1 $\frac{1}{4}$	18	26	27	35	46
1 $\frac{1}{8}$	21	35	30	24	23
1 $\frac{3}{4}$	—	2	2	—	—
1	6	13	19	23	24
1 $\frac{1}{2}$	—	—	1	1	1
Total of the Savings-banks . .	625	639	650	655	667

The rate of 5 $\frac{1}{2}$ % which since 1889 had not been paid by any bank, is re-established by one savings-banks in Galicia.

The number of savings-banks which paid 5 % on deposits reached a maximum of 217 in 1879 and in 1910 was 24.

The number of those which were able to pay a minimum rate of interest of 3 $\frac{1}{2}$ % has also diminished rapidly: there were 62 in 1904, 18 in 1907, and 1910.

On the other hand, the number paying 4 % on deposits has been increasing steadily. It was 365 in 1906 (out of a total of 625) and rose 505 in 1910 (out of a total of 667).

Rate of interest on mortgage loans. — Almost all savings-banks grant mortgage loans ; during the last 5 years all except three transacted such business.

In 1910 there were variations in the rate of interest on mortgage loans in 70 Savings-banks ; out of which 44 raised the rate of interest while 26 lowered it.

The rate of interest on mortgage loans has varied from 4 to 8 % ; the commonest rate of interest between 1906 and 1910 was 4 1/2 %. The average rate has risen during these years from 4.73 % to 4.79 %.

The distribution of Austrian savings-banks according to the established rate of interest on mortgage loans, is shown in the following table :

Normal rate of interest on mortgage loans granted by Savings-banks	1906	1907	1908	1909	1910
4	3	3	—	—	—
4 3/10	3	1	1	—	—
4 1/4	59	30	19	16	13
4 3/10	5	4	—	—	—
4 1/2	262	255	242	268	284
4 9/10	2	3	3	3	3
4 3/4	114	136	155	182	183
4 8/10	—	—	1	1	1
5	130	149	165	121	114
5 1/4	4	8	5	6	10
5 1/2	13	18	16	15	14
6	16	17	26	26	26
6 1/2	7	5	7	7	10
7	4	7	6	6	6
8	—	—	1	1	—
Number of Savings-banks which have not granted mortgage loans . .	3	3	3	3	3
Total of Savings-banks . . .	625	639	650	655	667

Statistics of Savings-banks accounts. — At the end of the working year 4,262,108 savings bank pass-books were in circulation. During the year 624,918 were issued and 482,105 were annulled, an increase of 142,813.

number of savings-banks accounts. The increase during the last five years has always been high as shown in the following table:

Years	Number Savings-bank pass-books in circulation	Increase	
		in actual figures	per cent
1906	3,711,977	104,230	2.89
1907	3,860,935	148,958	4.01
1908	3,996,548	135,613	3.53
1909	4,119,295	122,747	3.03
1910	4,262,108	142,813	3.47

If we compare the number of inhabitants with the number of pass-books issued, we find that there were, at the end of the year 1910, 14.9 pass-books per 100 inhabitants, with a maximum of 33.5 per 100 in Upper Austria and of 31 per 100 in Salzburg and a minimum of 0.3 per 100 inhabitants in Dalmatia and 3 in Bukovina. During the last 5 years, from 1905 to 1910, the average proportion of pass-books per 100 inhabitants increased from 13.1 to 14.9.

It is interesting to follow the distribution by value of the savings-bank accounts of 1910 and to observe the movement from the year 1900 to the last working year.

Classification according to amount of deposits	Number of Savings-bank accounts during the years		
	1900	1905	1910
Exceeding 200 crowns	1,248,385	1,389,197	1,692,975
200 to 1,000 "	1,064,878	1,143,844	1,256,910
1,001 " 2,000 "	404,496	469,885	548,636
2,001 " 4,000 "	271,822	333,472	409,787
4,001 " 6,000 "	93,915	123,060	155,473
6,001 " 8,000 "	44,651	55,482	72,377
8,001 " 10,000 "	26,825	31,843	40,661
10,001 " 20,000 "	33,363	45,784	60,828
Exceeding 20,000 "	10,384	15,180	22,461
Total	3,198,725	3,607,747	4,262,108

Circulation of working capital. — In 1910 the deposits reached 55,621,822 crowns (58,880,730 or 3.58 % more than the preceding year) and the payments to 1,610,256,957 crowns (73,762,421 or 4.80 % more than the preceding year). The circulation of capital was very favourable. The normal rate of interest of 4.05 % (against 3.95 % in 1909) the accu-

culated working capital increased from 3,183,235,628 crowns on deposit the end of 1909 to 3,315,878,779 crowns in 1910 with an increase of 4.7 during the last working year as compared with the previous year.

The average value of savings-bank accounts increased steadily during the last years rising from 1,321 crowns in 1906 to 1,418 crowns in 1910, while over the same period the proportion of the sums deposited to the population gave an average for each inhabitant of 173 crowns in 1906 and 177 crowns in 1910.

Total deposits. — At the end of 1910 the sixth milliard of crowns was exceeded for the first time. In the statistics of the preceding years, are struck by the rapid increase in the capital accumulated by the savings banks. In the brief space of 5 years, from 1906 to 1910, deposits increased by 1,297,299,394 crowns. This noteworthy increase is due principally to Bohemia (467 million crowns) and to Lower Austria (342 million crowns).

The increase in deposits from 1906 to 1910 is shown by the following figures :

	1906	1907	1908	1909	1910
Sum total of deposits, in crowns	4,904,416,675	5,077,304,571	5,393,899,011	5,769,946,157	6,045,171,157

As this continued increase is of great practical importance we will examine the forces which have produced it. The statistics under examination prove that the increase of disposable funds in Austrian savings-banks is due principally to the accumulated interest on capital already deposited and not withdrawn.

Years	Excess of new deposits (+) or of payments (—)	Increase of interest	Total increase
	in millions of crowns		
1906	— 21.59	178.13	156.54
1907	— 18.66	191.54	172.88
1908	+ 112.61	203.99	316.60
1909	+ 110.25	215.80	326.05
1910	+ 95.35	229.86	325.21
1906-1910	+ 277.98	1,019.32	1,297.30

The Investment of Savings-bank deposits. — More than half (57.58 %) of capital deposited in savings-banks was invested in urban or rural mortgage loans. With the statistics for 1908-09 we are able to compile the following table :

Nature of the investment	1909	1910	Increase or decrease in %
Mortgage loans	3,570,043,686	3,763,345,318	+ 5.41
Loans to Communes (without mortgage)	264,062,241	315,741,569	+ 9.57
Loans on bills of exchange	205,812,138	222,438,166	+ 8.08
Loans on bonds and securities	75,024,590	75,222,082	+ 0.26
Personal loans	3,585,791	3,782,480	+ 5.49
Movable property	1,566,076,576	1,651,425,781	+ 5.45
Real estate	98,479,482	99,569,032	+ 1.11
Loans with Credit institutions	291,211,794	265,518,537	— 8.82
Cash in hand	39,531,696	42,179,329	+ 6.70
Other assets	86,298,181	86,963,871	+ 1.33
Total	6,200,125,875	6,526,186,265	+ 5.26

The mortgage loans (comprising those granted to communes on mortgage and amounting in 1910 to 167,408,320 crowns) have steadily increased. The increase has been especially noteworthy in 1910 (5.41 % compared with 3.72 % in the preceding year).

Years	Mortgage loans	Increase compared with that of the preceding year		Percentage of mortgage loans to all other assets
		in crowns	%	
05	3,097,440,390	—	—	—
06	3,208,894,814	+ 111,454,424	+ 3.60	59.3
07	3,329,831,767	+ 120,936,953	+ 3.77	59.6
08	3,442,153,795	+ 112,322,028	+ 3.37	60.0
09	3,570,043,686	+ 127,889,891	+ 3.72	57.6
10	3,763,343,318	+ 193,301,632	+ 5.41	57.7
From 1906 to 1910	—	+ 665,904,928	+ 21.50	—

Unfortunately the official Statistics do not make any distinction between the urban or rural nature of the property on which mortgage loans are granted. Although even this distinction would not suffice to show exact amount of savings bank capital which was actually invested in favour of agriculture, yet, within certain limits, it would serve to show broad general movements in the investment of the national saving mortgage loans.

The importance into which the aggregate of mortgage loans granted by the Savings-banks has grown, makes it desirable that the sums devoted to urban and rural mortgage loans should be definitely ascertained in future. While in 1909 this aggregate amounted to 3,402,619,374 crowns (deducting, that is to say, the mortgage loans granted to communal authorities), the mortgage loans granted by public land credit institutions and joint-stock mortgage banks amounted in that year to 2,598,059 crowns.

CHILI.

MORTGAGE CREDIT IN CHILI.

OFFICIAL SOURCES:

INA CENTRAL DE ESTADISTICA. Anuario Estadístico de la Republica de Chile (*Central Statistical Office. Annual Statistics of the Republic of Chile*) Vol. III. 1910. Santiago, Chili, 1912.

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RESEÑA PASADO AL SUPREMO GOBIERNO dando cuenta de las operaciones ejecutadas en la Caja de Crédito Hipotecario durante el año 1910 (*Report Presented to the Government on the Transactions of the Mortgage Credit Bank in 1910*) Santiago, Chili, 1912.

CAJA DE AHORROS DE SANTIAGO (*Savings Bank of Santiago*). Santiago, Soc. Imprenta y Litografía Universo, 1912.

RESEÑA DE LA CAJA NACIONAL DE AHORROS correspondiente al año 1911. (*Report of the National Savings Bank for the Year 1911*). Santiago, Soc. Imprenta y Litografía Universo, 1912.

ALFONSO BORGOÑO (Luis), Manager of the Mortgage Credit Bank. La Caja de Crédito Hipotecario (*The Mortgage Credit Bank*). 2 vols. Santiago, Impr. Cervantes, 1912.

"El Mercurio", Daily Newspaper, January 1st., 1912.

In an article which appeared in the last number of our Bulletin, we spoke of the organisation of mortgage credit in Chili, and in particular of the *Caja de Crédito Hipotecario*, the most important institution for mortgage credit.

Before treating of other establishments for this kind of credit, we would recall to our readers that the above bank was founded by law of 1906; it is not precisely a State bank, but an institution for the benefit of the public. It facilitates the granting of mortgage loans and their repayment at long maturity in annual instalments. For this purpose it issues mortgage bonds which the mortgager negotiates for cash. The success of this institution is very remarkable; the amount of the bonds, which in 1868 was 4 millions of pesos, had increased in 1910 to 205 millions, and in the same year the reserve fund had risen to about 7 millions of pesos.

Thanks to the good and solid organisation of the Bank, its paper favourably accepted on the international money market.

And now we come to the subject of private mortgage-banks, and savings-banks, these establishments being closely connected,

§ I. PRIVATE MORTGAGE BANKS.

The organisation of these banks is modelled on that of the *Caja Crédito Hipotecario*, founded by law of August 29th., 1855.

The same law authorised the establishment of private mortgage credit banks, granting them the right to issue bonds of the same value as those of the Bank.

Such banks may either be constituted by associations of proprietors who contract guaranteed loans on their landed property, or of capitalists who grant mortgage loans; or they may have a co-operative basis (*Genossenschaft type*(1)).

In the first case the Bank issues bonds to the amount of the mortgage in its favour, and gives them to the mortgager; in the second case, it gives him cash to the value of the mortgaged property. Or, the Bank may issue bonds of a corresponding value, and negotiate them on its own account. Banks thus constituted are subject to the same rules as the *Caja Hipotecaria* and the limited liability companies; their manager must be appointed by the President of the Republic, who selects one of three persons proposed by the Board of Management.

Limited liability companies are also regulated by the Commercial Code (Arts. 340, 425, 426) which establishes their special form. For such a society may have a legal existence it must be authorised by a decree of the President of the Republic and a similar authorisation is needed for any modification of its rules, or for lengthening or shortening the term for which it is founded. These banks cannot stipulate that the debtor should repay the capital in a lump sum or issue instrument of credit other than mortgage bonds (for example orders to bear) neither may they engage in any speculation or industrial business.

However, the law permits them to conduct all operations in connection with mortgage business. Therefore, these mortgage banks can already stated, negotiate their own bonds, advance money to facilitate the conversion of mortgage debts, and purchase credits and other instruments for the purpose of fulfilling their obligations etc.

The prevailing opinion is that they may not issue promissory notes though for some time they did issue them. This class of instrument of credit constitutes a promise to liquidate a debt in a comparatively short

(1) See *Bulletin of Economic and Social Intelligence*, Year IV, No 3. pages 96 and following, and year I. No. 1. pages 45 and following.

e, a year at the farthest, the sum due to be paid all at once, and is openly contrary to the spirit of the institutions authorised for mortgage credit by the Chilean law, which provides that the mortgagee can only get repayment in annual instalments. Therefore it is the common notion that such transactions are inadmissible for mortgage bonds. In these banks are withdrawing their promissory notes from circulation have ceased to issue them.

* * *

In accordance with these legal provisions, several private mortgage banks have been established in Chili; some of them as independent establishments, others as sections of already established banks which had then transacted banking operations generally without specialising. The first class belong:

The *Banco Chileno Garantizador de Valores* (Santiago); The *Banco Chileno Garantizador del Sur* (Concepción); The *Banco Hipotecario de Valparaíso*; the *Banco Nacional Hipotecario i Agrícola*; The *Banco Pórtor Hipotecario* and the *Caja de Crédito Territorial*, (Santiago).

On the other hand, the following banks of a commercial character have started mortgage sections: *Banco de Chile*; *Banco de Valparaíso*, *Banco Agrícola*, *Banco Commercial de Chile*, *Banco de Santiago*, *Banco de Concepción*.

Of the first mentioned banks the only ones still existing are the *Banco Chileno Garantizador de Valores* and the *Banco Hipotecario de Valparaíso*; the others have been liquidated. Of the sectional banks mentioned, some have been liquidated and the rest absorbed by the *Banco Hipotecario de Chile*, established by the *Banco de Chile* and formed by the union of several of the commercial banks already mentioned.

These three mortgage banks of private character are permitted to transact business other than strictly mortgage business. Hence we see that the law of 1855 has been interpreted in a wide sense. However, it only refers to operations guaranteed on real estate of the first rank, and explains the credit and high quotations of the bonds.

The 1855 law has been interpreted in an equally large sense in respect to the nomination of managers, as, in the case of private banks, the real manager is nominated by the share-holders, whilst the Government only appoints a deputy manager for general supervision. This official has to examine the accounts, sign mortgage bonds or promissory notes given as security, and supervise the drawings of bonds and the burning of those expired.

The importance of these various banks is seen in the following table which shows the extent of the circulation of their mortgage bonds:

Mortgage Bank Bonds Issued and Paid off in 1910.

Name of Bank	Bonds in Circulation on December 31st., 1910	Issued in 1910 in pesos (paper)	Paid off in 1910	In Circulation on December 31st. 1910
Banco Hipotecario de Chile . .	62,256,100	24,215,900	9,652,500	77,819,5
Banco Garantizador de Valores .	32,332,500	6,480,500	5,177,900	33,635,100
Banco Hipotecario de Valparaíso	5,068,600	2,941,000	874,400	7,633,200
Total . . .	100,657,200	33,637,400	15,704,800	118,589,800

When we consider that at the end of 1910 the issue of bonds by the Mortgage Bank amounted to \$204,077,000, we see that the issues of private banks correspond to 57.8 % of those of the State Mortgage Institution.

At the end of 1912 the financial situation of the *Banco Hipotecario de Chile* was as follows: Regulation capital \$10,000,000; paid up capital \$6,000,000; reserve fund \$1,000,000; dividend fund \$258,180; amount to be paid in dividends \$480,000, which corresponds to 8 % per half year or 16 % per year.

§ 2. SAVINGS BANKS.

These are directly connected with mortgage credit inasmuch as the disengaged funds are invested exclusively in mortgage bonds.

A decree of May 14th., 1860, which put in operation article 126 of the law of August 29th., 1855 relative to the establishment of the *Caja de Crédito Hipotecario*, empowered the Board of Management of that bank to allot half the profits from interest overdue to the foundation an encouragement of Savings Banks. These, for their part, were obliged to invest their funds in the purchase of mortgage bonds of the *Caja*.

For many years the reserve fund formed by means of this interest was inconsiderable. Not till 1883 did the Board of Management of the *Caja* deem it opportune to profit by the already mentioned decree. The *Caja Hipotecaria* founded a savings-bank with a double object: (a) of facilitating the investment at interest of small sums which would otherwise be spent unproductively (b) of having a customer bound to buy its mortgage bonds.

It was not possible however, to extend the operations of this bank branches over the country without endangering its success; it was therefore decided at first to limit the branches solely to the province of Santiago.

The Savings Bank was endowed with 50,000 pesos to be repaid gradually to the *Caja Hipotecaria*; then it was decided to grant it an annual subsidy that it might be able to provide for its working expenses of its own resources.

Thus, in 1884 there arose the Savings-Bank of Santiago worked on the same principles as similar institutions in Europe. It pays 5% interest on deposits. In 1905 there arose successively 14 other Savings-banks in various provinces, viz. at Tacna, Iquique, Antofagasta, La Serena, San Felipe, Valparaíso, Curicó, Talca, Chillán, Concepción, Valdivia. All these depend on the *Caja de Crédito Hipotecario* for their head office but they are subsidised by the State.

At the close of 1910 a new law was passed intended to give them a new organisation and a new impetus. This law came into force on January 1st., 1911.

As the various banks (except that of Santiago), are subsidised by the State, which furnishes the *Caja Hipotecaria* with funds, the law now places them under a State Central Savings-Bank (*Caja Nacional de Ahorros*).

The Savings Bank of Santiago, however, continues to exist along with the National Bank, which it represents in Santiago.

The National Savings Bank is dependent on the *Caja de Crédito Hipotecario*, which has the special duty of managing and inspecting its various branches. The Bank of Santiago, however, has its own board of management.

Each of the various branches of the National Bank acts as a Central Bank for the whole of its district in which it has many agencies, the Post Office and the Treasury agencies.

Even at the end of the first working year (1911), the benefits arising from this new organisation were observable. At the close of 1910, the various savings-banks when they came to be under the National Bank, numbered only 12 in number (not counting that of Santiago) and had a total of 1,525,874 pesos in deposits, in 206,140 accounts. At the close of 1911, the banks numbered 13 with eight branches and 79 agencies, and the deposits amounted to 26,502,310 pesos in 256,181 accounts. Three more savings banks are in process of establishment. An innovation has been introduced by the National Savings Bank, viz. the use of stamps on cards for the purpose, which allows of the saving of very small sums (for instance 20 c.), which otherwise would probably be spent. In six months, 59 pesos worth of these cards were sold. They are of various values from 20 c. to 1 and 5 pesos.

The importance of the Savings Banks in Chili may be estimated not so much by their actual condition as by the rapidity of their development, as is shown in the following table:

*Amount of Deposits in the Savings Banks
Dependent on the "Caja Nacional de Ahorros" and their Branches*

Savings Banks and Branches	Year of Establish- ment	Amount of Deposits at the End of December, 1910	Amount of Deposits at the End of December, 1911	Increase of Deposits in 1911	Average per Deposit in 1911
		(pesos)	(paper)		
Tacna	1909	329,407	510,885	181,478	
Iquique	1904	2,528,266	2,779,296	251,031	
Antofagasta	1905	2,787,873	3,381,650	593,777	
La Serena	1907	1,005,884	1,705,077	699,192	
San Felipe	1910	332,227	910,200	577,974	
Valparaíso	1901	5,947,989	6,351,798	403,809	
Curicó	1907	597,397	66,307	268,910	
Talca	1905	1,333,617	1,634,461	300,844	
Chillán	1905	1,087,074	1,413,615	226,541	
Concepción	1904	2,014,894	2,276,704	261,809	
Temuco	1907	610,721	848,291	237,570	
Valdivia	1905	850,526	1,381,554	534,028	
Rancagua	1911	—	31,234	31,234	
Taltal	1911	—	236,767	236,767	
Tocopilla	1911	—	463,393	463,393	
Ahmedral	1911	—	285,798	285,798	
Puerto	1911	—	293,048	293,048	
Viña del Mar	1911	—	246,064	246,064	
Quillota	1911	—	332,028	332,028	
Llay-Llay	1911	—	130,563	130,563	
Talcahuano	1911	—	220,022	220,022	
Total		\$ 19,525,875	26,301,755	6,775,880	
Various deposits		—	200,556	200,556	
Total		19,525,875	26,502,311	6,976,436	

So we see that in one year the deposits increased in the proportion of 1/2% exclusive of those in the eight branches which did not exist in 1910. To these data we may add those of the

Savings Bank of Santiago.

In the year	1884	\$	76.224
" "	1885	"	284.351
" "	1890	"	1,776.763
" "	1900	"	3,390.965
" "	1910	"	13,433.482
" "	1911	"	19,636.071

Thus, at the end of 1911 there was a total of deposits in the Savings-banks of 46,138,381 pesos.

This result fully justifies the financial burdens imposed on itself by State in order to encourage saving, the fruits of which will afterwards expended in behalf of agriculture. In 1911 the Government granted sum of 560,000 pesos as a subsidy to cover the greater part of the work-expenses.

* *

We do not wish to close this article without special mention of the Agricultural Bank, which is empowered to make small loans to the peasantry, in addition to its ordinary business. It represents the first step taken in Chili towards personal agricultural credit. Instituted in 1911 at Graneros by the *Caja Hipotecaria* on the initiative of its manager, M. Luis Barros Borgoño, it is an off-shoot of the Savings Bank of Santiago. Its deposits must be invested in mortgage bonds; it has been assigned however a special fund by which it can grant discount and short term loans to farmers in the neighbourhood. The sums lent must be applied to agricultural purposes, such as improvement of the land, increase of production, preservation of products etc.

This institution only began to act in 1912, so it is too soon yet to speak of the results obtained by it.

UNITED STATES.

THE SOURCES OF RURAL CREDIT AND THE EXTENT OF RURAL INDEBTEDNESS.

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PART I.

INVESTIGATIONS PRIOR TO 1912 CONCERNING RURAL CREDIT AND INDEBTEDNESS.

§ I. FORMER SOURCES OF CREDIT.

In discussions of the organisation of rural credit in the United States it is well to exclude the credit that is given by the seller to the purchase of real estate, which is usually secured by the return of a mortgage. This class of credit makes no demand on the credit market and consists of nothing more than an exchange of legal documents — a deed for a mortgage and usually some unborrowed cash.

Banks and insurance companies. — Previous to the agitation and complaints of farm debtors, which attracted national attention about the middle of the ninth decade of the former century and continued for 10 years, and also during that period, credit had been obtained by farmers under onerous conditions, if at all, throughout large areas of the United States. The national banks, not having power to loan on mortgage security, were only a small source of credit to farmers and then only to the more wealthy ones.

There were some savings banks in a few States and these were lenders to the extent that they had money to loan. There were many private banks and bankers from whom farmers obtained loans at high rates of interest and there were some individual lenders of money among neighbours and in nearby towns and cities.

Loan agents began to multiply rapidly about 30 years ago in the northern half of the Mississippi Valley and especially in the more recently cultivated regions; the principals of these men were Eastern life insurance companies and other possessors of large amounts for loaning.

Mortgage companies. — About the same time mortgage companies began to be organized to do business, chiefly in the northern half of the Mississippi Valley, and to some extent in the Southern States. Many

these companies did a very profitable business and many others failed. The credit provided by them was an important portion of the supply at the time, but their business as conducted was of uncertain duration. The affairs of these mortgage companies have never thoroughly been made the subject of history and it is now difficult to collect much information with regard to them.

The Honourable L. M. Shaw, Secretary of the Treasury under President McKinley's administration, was a banker in the State of Iowa, prominent agricultural commonwealth in the northern half of the Mississippi Valley, during the time when mortgage companies were first numerous. At the request of the writer of this article, he supplies some information with regard to credit conditions 20 to 30 years ago in the West of the country mentioned.

"There were a large number of mortgage companies — a thousand or more — who did a farm loan business in the Northwest during the eighties and nineties," he writes. "Nearly all, perhaps quite all, of them who guaranteed their mortgages, failed. Those who did not guarantee their mortgages prospered. The unguaranteed mortgages proved to be much better than those that were guaranteed. The Lombard Investment Company was perhaps the largest of these companies. They had a very wide clientèle and could sell anything. They were in many instances imposed upon by their local agents, and, without definite information covering the wide range of territory in which they loaned, they made some bad loans. When the depression which followed the panic of 1893 occurred they could not meet their interest on guaranteed mortgages.

"There was a crop failure in 1894. Millions of acres of maize in the State of Iowa, not to mention Nebraska, Kansas and the Dakotas, were never picked. Acres of it did not yield a bushel to the acre. Farmers could not pay their interest, and then the Eastern holders of these mortgages, with customary want of wisdom, put every company into bankruptcy that they possibly could, placed their mortgages in the hands of inexperienced Eastern lawyers to foreclose, and sold the land for what they could get. Millions of acres were sold under \$10 an acre and are now worth \$125. These same people that took these Western mortgages recognize only one error in what they did. They think they were wise in taking the mortgages. They were wise in taking the mortgages, wise in putting the companies that knew about them into bankruptcy.

"From 1888 to 1892 anybody could organize a mortgage company with or without capital, and float loans, provided that they were guaranteed. The best and most conservative purchasers of farm mortgages would not take one that is guaranteed. They recognize that no guaranty is sufficient in case of real disaster, and that reputation is a sufficient guaranty against any possible error in judgement on the part of the local agents.

"You ask whether they issued bonds or debentures. The business was conducted in every way known to man. Mortgages were sold without guaranty. Bonds and debentures were issued.

"You ask to what extent they sold mortgages to banks and individuals. They sold them by the million. As a rule the banks purchased on the reputation of the men who made the loans. Few of them lost any money. These loans were made on agricultural lands and on property, but I have been speaking particularly of agricultural lands."

"There are a large number of mortgage companies, probably a thousand or more, still doing business, that are older than 1900. Many of the defunct companies went out of business without any fault of their own and because they were the creatures of circumstances. Others became foolish enough to think that they could loan in a half dozen States without being misled by agents. A hundred or more — perhaps seven hundred — who loaned in restricted territories where they were well acquainted and did not guarantee their mortgages, fared well, and their clients fared better."

§ 2. INVESTIGATIONS CARRIED OUT.

Comparatively little was known concerning rural credit in the United States previous to 1890. During the few years previous to that year a demand for information in regard to mortgage debt grew out of the widespread discontent among farmers and working men and the discussion of persons interested in social science. This led to an investigation of the problem in 1887 by the bureaux of labour statistics of several States and before 1890 work in this direction had been completed or begun by the bureaux of Illinois, Michigan, Connecticut, Ohio, and New Jersey.

Mortgage statistics obtained in the execution of the tax laws have been published also by *California*, and had been obtained from the returns of county clerks in *Texas* and published by the Commissioner of Agriculture; in *Ohio*, the Secretary of State had published reports of court recorders for a series of years showing the number of real estate mortgages made, the debt incurred under them, and the number and amount of the cancellations of record; while in *Indiana* the Bureau of Statistics had for several years published incomplete reports of the number and amount of the recorded real and chattel mortgages and of the record satisfactions.

At its annual meeting in 1888, the National Board of Trade requested the Department of State to obtain information in regard to mortgages in foreign countries and the results of the efforts of that Department were published in November and December, 1889.

Real estate mortgages in 1890. — Under the Act of Congress providing for taking the Eleventh Census (1890) the Superintendent of Censuses was required to "collect the statistics of, and relating to, the record indebtedness of private corporations and individuals." This extraordinary addition to the regular census work was the consequent of considerable popular concern in regard to the present condition of mortgage

ors and their probable fate under a tendency which was supposed to be increasing their number and their burden.

By special Act of Congress in 1890 the Superintendent of Census was required "to ascertain the number of persons who live on and cultivate their own farms, and who live in their own homes, and the number of persons who hire their farms and homes, and the number of farms and homes which are under mortgage, the amount of mortgage debt, and the value of property mortgaged. He shall also ascertain whether such farms and homes have been mortgaged for the whole or part of the purchase price for the same, or for other purposes, and the rate of interest paid on mortgage loans." An appropriation of one million dollars was made to pay the expenses of this investigation.

Real estate mortgages in 1900 and 1910. — In the census of 1900, among the subjects covered were the tenure of farm homes and other places and the fact of mortgage or no mortgage for farm homes and other places occupied by the owners, but no attempt was made to ascertain the amount of mortgage indebtedness.

In 1910 there was a renewal of that portion of the "farms and homes" investigation of 1890 which ascertained the amount of the mortgage indebtedness on farms operated by owners, and there was also a repetition of the work of the two preceding censuses for ascertaining the tenure of farms and other homes and the number of those that were occupied by owners under mortgage.

Discussions and investigations in 1912. — The investigations mentioned constitute the principal and, indeed, nearly all of the sources of information with regard to rural credit in the United States previous to 1912. In this year Mr. David Lubin, delegate from the United States to the Permanent Committee of the International Institute of Agriculture, foreseeing that the time was ripe for taking steps toward the cheapening of agricultural credit in the United States and toward increasing the supply of credit to farmers, effectively brought to the attention of the public the possibilities for organizing co-operative credit associations among farmers and of establishing mortgage banks somewhat after German and French models.

Public opinion was aroused by Mr. Lubin's suggestions and these were discussed in probably all of the newspapers and magazines, and the commercial, financial, and trade papers of the nation. In the meantime the President of the United States became interested and by his direction several ambassadors to European countries began to collect information and reports. Hearings were held by committees of the National Congress, many special articles were written for publication by financial experts and numerous public addresses delivered. Late in the year the Secretary of Agriculture published some of the results of a special investigation made by him to ascertain local conditions with regard to agricultural credit.

Such is merely an outline of steps taken in investigation and discussion in the United States concerning rural credit.

§ 3. CENSUS RESULTS.

Some of the results of the censuses of 1890, 1900, and 1910 may be condensed to small tables to exhibit the number and percentage of mortgaged farms and the amount of mortgage incumbrance on them. The farm was the statistical unit in 1890 and in 1900, but for 1910 the writer is compelled to use the number of farms for the reason that the Bureau of the Census had not tabulated the statistics of farm tenure for 1910 with the farm as the unit at the time when this article was written in the last days of 1910.

Table I exhibits the number of farm families (a_1) or farms (a_2, a_3) in the United States in the three census years mentioned, the number of farm families (b_1), or of farms operated by hiring families (b_2, b_3), and the number of families owning the farms operated by them ($a_1 - b_1$), or the number of farms operated by owners ($a_2 - b_2, a_3 - b_3$). Of the last class (farm owning families or farms operated by owners, there is a subdivision into the class of "under mortgage" (c_1, c_2, c_3) and "free of mortgage" (d_1, d_2, d_3).

It is unnecessary further to explain Table I except to explain the geographic divisions of States. The grouping of States in the plan adopted agrees with that of the Bureau of the Census. The States of each group are contiguous and the groups have been so constructed as to include States of approximately similar economic conditions. Following is a list of States in the nine divisions adopted:

I. New England. — Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

II. Middle Atlantic. — New York, New Jersey, Pennsylvania.

III. South Atlantic. — Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.

IV. East North Central. — Ohio, Indiana, Illinois, Michigan, Wisconsin.

V. West North Central. — Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

VI. East South Central. — Kentucky, Tennessee, Alabama, Mississippi.

VII. West South Central. — Louisiana, Texas, Oklahoma, Arkansas.

VIII. Mountain. — Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Idaho.

IX. Pacific. — Washington, Oregon, California.

Tenure and ownership under mortgage. — Table I becomes more significant when converted into the percentage found in Table II. In that table it appears that 65.9 per cent. of all farm families owned their farm in 1890, 64.4 per cent. in 1900, and 63.0 per cent. in 1910. Of the farm families owning their farms 28.2 per cent. owned subject to mortgage in 1890, 31.1 per cent. in 1900, and 33.6 per cent. in 1910.

The trend, therefore, is toward tenancy in the tenure of farms and also toward a larger percentage of mortgaged farms of those that are operated by owners.

Geographic division	Total farm families or farms				Hiring				Unknown tenure	
	1890		1900		1890		1900		1900	1910
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)		
New England	190,361	188,802	187,057	188,802	24,906	20,717	15,015	1,212	—	—
Middle Atlantic	470,046	468,379	468,724	468,379	116,779	126,023	104,271	2,978	—	—
South Atlantic	772,596	772,596	772,596	772,596	334,135	427,710	510,420	6,651	—	—
East North Central	1,039,661	1,123,489	1,135,895	1,123,489	272,288	296,799	303,597	7,114	—	—
West North Central	938,998	1,038,667	1,038,667	1,038,667	251,829	301,006	342,618	7,860	—	—
East South Central	700,956	899,419	899,419	899,419	337,502	433,439	538,738	6,788	—	—
West South Central	485,876	712,805	712,805	712,805	234,926	362,119	497,585	5,973	—	—
Mountain	62,365	103,932	103,932	103,932	9,223	14,502	19,690	1,349	—	—
Pacific	107,220	141,200	141,200	141,200	22,845	31,528	32,733	1,382	—	—
United States	4,767,179	5,698,901	5,698,901	5,698,901	1,624,433	2,013,903	2,354,676	44,314	—	—

Geographic division	Under mortgage				Free of mortgage				Unknown whether mortgaged or free	
	1890		1900		1890		1900		1900	1910
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)		
New England	467,38	55,040	58,474	58,474	118,717	106,341	108,938	3,742	906	906
Middle Atlantic	1,307,770	140,881	134,803	134,803	222,197	208,729	217,257	10,113	2,976	2,976
South Atlantic	31,080	83,858	110,198	110,198	387,381	416,425	474,742	26,554	8,214	8,214
East North Central	288,359	320,128	327,463	327,463	479,014	491,850	473,822	19,968	7,759	7,759
West North Central	330,070	314,431	346,182	346,182	357,099	395,018	404,555	10,452	8,209	8,209
East South Central	16,134	74,712	114,195	114,195	346,320	364,661	388,337	19,519	7,420	7,420
West South Central	11,955	64,243	132,252	132,252	238,905	289,585	299,303	20,888	9,350	9,350
Mountain	7,511	12,161	33,060	33,060	45,631	71,508	125,940	3,352	1,814	1,814
Pacific	24,240	29,119	53,407	53,407	60,135	70,555	95,202	2,815	1,324	1,324
United States	886,957	1,094,573	1,312,034	1,312,034	2,255,789	2,422,678	2,588,596	126,433	48,092	48,092

Owning and operating.

TABLE II. — *Percentage of farm families in 1890
and of farms in 1900 and 1910, by tenure.*

Geographic division	Percentage of total farm families					
	Owning			Hiring		
	1890	1900	1910	1890	1900	1910
New England.	86.9	88.9	92.0	13.1	11.1	8.0
Middle Atlantic.	75.2	74.1	77.7	24.8	25.9	22.3
South Atlantic.	54.2	55.2	54.1	45.8	44.8	45.9
East North Central. . . .	73.8	73.7	73.0	26.2	26.3	27.0
West North Central. . . .	73.2	70.8	69.1	26.8	29.2	30.9
East South Central. . . .	51.8	51.4	49.3	48.2	48.6	50.7
West South Central. . . .	51.6	50.9	47.2	48.4	49.1	52.8
Mountain	85.2	85.8	89.3	14.8	14.2	10.7
Pacific.	78.7	77.5	82.8	21.3	22.5	17.2
United States.	65.9	64.4	63.0	34.1	35.6	37.0

Geographic division	Percentage of total farm families owning and operating					
	Under mortgage			Free of mortgage		
	1890	1900	1910	1890	1900	1910
New England.	28.2	34.1	34.9	71.8	65.9	65.1
Middle Atlantic.	37.0	40.3	38.3	63.0	59.7	61.7
South Atlantic.	7.4	16.8	18.8	92.6	83.2	81.2
East North Central. . . .	37.6	39.4	40.9	62.4	60.6	59.1
West North Central. . . .	48.0	44.3	46.1	52.0	55.7	53.9
East South Central. . . .	4.5	17.0	22.7	95.5	83.0	77.3
West South Central. . . .	4.8	18.2	30.6	95.2	81.8	69.4
Mountain	14.1	14.4	20.8	85.9	85.6	79.2
Pacific.	28.7	27.6	36.8	71.3	72.4	62.2
United States.	28.2	31.1	33.6	71.8	68.9	66.4

Farm mortgage debt of 1910. — The amount of mortgage debt that numbered farms operated by owners in 1910 is exhibited in Table III by geographic divisions. It is necessary to make a series of estimates undertaking to establish the full amount of this debt for the reason that on a large fraction of the schedules of census enumerators no reports are made of the amount of mortgage debt, although it was reported that the farm was mortgaged. Apparently it is proper to apply to these farms an average debt of the farms for which the amount was reported, and this has been done in Table III.

Of the 1,312,034 farms operated by owners reported in 1910 to be mortgaged, 1,006,511 were reported with the amount of indebtedness, which aggregates \$1,726,172,851, or an average of \$1,715 per farm. When this average is multiplied into the total number of farms operated by owners and reported to be mortgaged, the total mortgage debt on these farms, both reported and estimated, amounts to \$2,293,160,278. About two-thirds of this stupendous debt incumbers farms in the northern half of the Mississippi Valley, a region of unexampled agricultural prosperity.

TABLE III. — *Mortgage debt on farms operated by owners, 1910.*

(Census).

Geographic division	Number of farms with mortgage debt	Farms reporting mortgage debt		Average for reported farms	Computed for all incumbered farms
		Number reporting	Amount of debt		
New England	58,474	53,791	\$ 58,553,508	\$ 1,088	\$ 63,694,564
Middle Atlantic	134,803	118,220	178,326,219	1,508	203,406,166
East North Central	327,463	257,884	459,886,968	1,783	593,143,690
West North Central	346,183	236,975	608,480,562	2,568	889,412,446
South Atlantic	110,198	86,522	73,597,258	851	94,925,359
East South Central	114,195	85,282	59,769,643	701	79,557,660
West South Central	132,252	96,687	121,365,670	1,255	165,317,196
Mountain	33,060	26,731	59,364,185	2,221	73,406,137
Pacific	55,407	44,419	106,846,838	2,405	133,297,060
United States	1,312,034	1,006,511	1,726,172,851	1,715	2,293,160,278

Increase from 1890. — A comparison of the mortgage debt on farms operated by owners in 1910 with the amount of 1890 shows an enormous increase, both in body of debt and in rate of increase. The mortgage debt of 1890 on the farms of the description given was \$1,085,995,960, and 20 years later the amount of this description of farms had grown to be \$2,293,160,278. The debt had more than doubled.

It is possible to make comparison with another class of real estate mortgage debt in 1890. The investigation devoted to real estate mortgages in the census of that year ascertained that there was a mortgage debt of \$2,209,148,431 on areas expressed in acres. These areas included nearly all farms, but also included mining and forest areas not embraced in farms, and uncultivated suburban areas not yet subdivided into building lots.

It appears in the comparison that the mortgage debt on farms created by owners in 1910 was a little greater than the entire mortgage debt of 1890 on land that had not been subdivided into urban and suburban lots. The comparisons may be found in Table IV.

TABLE IV. — *Amount of real estate mortgage debt, 1890 and 1910.*

Geographic division	1890		1910
	On areas expressed in acres	On farms operated by owners	On farms operated by owner
New England	\$ 103,901,400	\$ 44,512,143	\$ 58,535,504
Middle Atlantic	393,683,952	234,538,777	178,326,211
South Atlantic	117,982,984	33,665,166	73,597,451
East North Central	551,238,725	336,156,531	459,886,661
West North Central	643,213,327	341,286,412	608,480,516
East South Central	84,797,356	12,432,680	59,769,641
West South Central	99,932,625	11,924,086	121,365,677
Mountain	52,796,579	10,905,181	59,364,176
Pacific	161,601,483	60,574,984	106,846,851
United States	2,209,148,431	1,085,959,960	1,726,172,851

Ratio of mortgage debt to farm value. — The great increase in farm mortgage indebtedness during 20 years can be explained by other facts. While this indebtedness has been increasing, the value of the mortgaged farms also has been increasing even in a greater degree than the indebtedness has, as appears upon examination of Table V. While the mortgage debt grew, as has been stated above, the value of the mortgaged farms increased from \$3,054,923,165 in 1890 to \$8,399,854,498 (partly estimated) in 1910.

Consequently, while the mortgage debt on farms operated by owners in 1890 was 35.5 per cent. of the value of the mortgaged farms, the similar mortgage debt of 1910 was only 27.3 per cent. of the value of the mortgaged farms. The facts are presented in tabular form in Table 1 but without details for geographic divisions.

TABLE V. — *Value of incumbered farms and other homes occupied by owners: and amount and percentage of incumbrance thereon.*

Classification of homes, and year	Owned and incumbered		
	Value	Amount of incumbrance	Percentage of incumbrance of value
<i>Farms</i>			
1890	\$ 3,054,923,165	\$ 1,085,995,960	35.55
1910 (partly estimated)	(1) 8,399,854,498	2,293,160,278	27.30
<i>Other homes</i>			
1890	2,632,374,904	1,046,953,603	39.77

(1) Estimate based upon "percentage of incumbrance" for reported farms, and estimated total incumbrance of all farms.

Average incumbrance and value. — The value of mortgaged farms stated by owners and the mortgage incumbrance thereon have been converted to averages by geographic divisions, and the ratio between mortgage debt and the value of the mortgaged farms has been compared with results which may be found in Table VI. A comparison is possible between 1890 and 1910.

The average value of a mortgaged farm operated by the owner in 1890 was \$3,444 and for 1910 the average grew to \$6,289. High average values are found in the Middle Atlantic, Mountain, and Pacific States and high average amounts of mortgage debt are found in the West North Central, Mountain, and Pacific States.

The average incumbrance on a mortgaged farm operated by the owner in 1890 was \$1,224 and by 1910 the average had become \$1,715. In the latter year the highest average mortgage was \$2,568 in the West North Central group of States, a region in which the average was below that for the United States in 1890.

The ratio between debt and security has already been stated for the United States. The percentage expressing this ratio has declined from 35.5 in 1890 to 27.3 in 1910. The percentages for the geographic divisions in 1890 ranged from 30.1 for the Pacific States to 43.3 for the South Central States, while the range for 1910 is from 23.4 per cent. for the Pacific States to 34.5 per cent. for the Middle Atlantic States.

TABLE VI. — *Average value and incumbrance of mortgaged farms operated by owners, and ratio of mortgage debt to value, 1890 and 1910.*

Geographic division	Average value		Average incumbrance		Mortgage debt as a percentage of value	
	1890	1910	1890	1910	1890	1910
New England	\$ 2,356	\$ 3,417	\$ 952	\$ 1,088	40.4	31.8
Middle Atlantic . . .	4,151	4,368	1,794	1,508	43.2	34.5
South Atlantic	2,698	3,124	1,083	851	40.2	27.3
East North Central . .	3,507	6,227	1,166	1,783	33.2	28.6
West North Central . .	3,074	9,965	1,034	2,568	33.6	25.8
East South Central . .	1,767	2,382	766	701	43.3	29.4
West South Central . .	2,331	5,006	997	1,255	42.8	25.1
Mountain	4,562	9,277	1,452	2,221	31.8	23.9
Pacific	8,312	10,291	2,499	2,405	30.1	23.3
United States	3,444	6,289	1,224	1,715	35.5	27.1

§ 4. TOTAL AGRICULTURAL DEBT.

The attempt is made for the purposes of this article to estimate amount of the agricultural debt of the farmers of the United States. Perhaps it is not desired that all details of the process shall be stated and it may be sufficient to indicate the general nature of the steps taken.

The mortgage debt on the real estate of farms operated by owners has already been determined to be \$2,293,000,000, including an estimate amounting to about one-fourth of the total.

The most difficult estimate to make is the amount of real estate mortgage debt on farms occupied by tenants. It will not do to add to this the average mortgage debt on farms operated by owners. Tenant farms are often comparatively small holdings and this is especially so in the case of cotton plantations that have been subdivided into tenancies. There are about 800,000 cotton tenancies and most of these may be eliminated as either being free of debt or as having the debt reported in the statement of the owner for the home part of the plantation. In addition to this there is very little mortgaging of farms and plantations in the cotton States.

Another large class of tenant farms that are invariably free of mortgage is composed of farms owned by elderly men who have lived on the farms for many years and have retired from active life on the farm.

with children or to maintain homes in towns and cities. These farmers are well-to-do men and their farms are free of mortgage. There is an immense number of them.

It may be stated as a general fact that tenant farming is poor farming in the United States. The tenant does not work under such restrictions and requirements as are prescribed in the best European management and the tenant will deplete the capital of a farm unless he is closely supervised. Such a farm becomes less and less acceptable as mortgage debt increases and if already under mortgage the indefinite continuance of debt is not safe as in the case of most farms operated by owners. These conditions are not everywhere found, but they are sufficiently prevalent to cause a smaller mortgage debt on tenant farms than on those operated by owners and also sufficient to make the percentage of mortgaged farms operated by tenants much below the percentage for owned farms.

It seems probable, therefore, that a real estate mortgage debt of \$1,000,000,000 is an ample estimate for the tenant farms and, if so, the minimum debt on all farm real estate is not more than \$2,793,000,000.

The investigation of local credit conditions made by the Secretary of Agriculture in the autumn of 1912, already referred to (1), established many conclusions that are useful in estimating the amount of other items of cultural debt. The estimate of the amount of the cotton crop liens illustrates. The value of the cotton crop to the farmers in 1912 was \$1,850,000,000. It was ascertained in the investigation referred to that, in 7 per cent of the counties where cotton is raised, no liens are placed on the crop by operating owners and that in 2 per cent of the counties, no liens are placed on the crop by tenants. The farms in these counties may then be eliminated.

It was ascertained in that investigation also that where liens are placed on the cotton crop, about 42 per cent of the operating owners do so and about 74 per cent of the tenants. The complementary percentages indicate further eliminations from cotton farms of those that have cotton crop liens.

The cotton crop of the remaining farms were subject to liens amounting perhaps three-fourths of its value and the resulting computation determines the debt represented by cotton crop liens to be about \$390,000,000. The owners and tenants whose crop is subject to lien, about one-fifth of the owners and about four-fifths tenants. Of the entire number of cotton farms about one-third are operated by owners and about two-thirds by tenants.

For computing the amount of the liens on crops other than cotton, the investigation of the Secretary of Agriculture provides some of the factors. The cotton farms are substantially all to be subtracted. An average lien greater than the cotton crop lien is adopted and a total amount

(1) The result of this investigation will be indicated in the second part of this article, which will be published in our next issue.

of \$450,000,000 on crops other than cotton is estimated. The debts in this case are about one-half owners and about one-half tenants.

Again, in the case of making an estimate of the amount of mortgage debt on farm chattels, the investigation of the Secretary of Agriculture is useful. Various State investigations of this subject indicate approximately the average amount of the chattel mortgage debt and an estimate of \$700,000,000 results. The debtors are about equally divided between owners and tenants.

Little attention has heretofore been paid to the unsecured credit given to farm owners and tenants by country merchants and for this reason the investigation by the Secretary of Agriculture included this subject. The credit in this case is given in the form of goods—of groceries, clothing, farm supplies, and machinery. The result of the computations that have been made indicate that there is an unsecured debt owing to local merchants by operating farm owners and tenants amounting to about \$250,000,000, about two-thirds of the debtors being owners and one-third tenants.

There is a miscellaneous class of debts owing mostly by operating farm owners and in a much less degree by tenants, consisting of unsecured debts other than those owing to local merchants. The adoption of \$417,000,000 for this item can hardly be regarded as the result of computation. There are many farmers who can and do obtain from banks such loans as they need to make, upon presenting a promissory note usually containing the name of an endorser. There are unsecured debts also owing to physicians, undertakers, the manufacturers of implements and machinery, and also to dealers in them.

As a result of the computations that have been made, it seems probable that the amount of the agricultural debts of the farmers of the United States is as great as \$5,000,000,000. The debt of agricultural labourers is not included. This, however, is comparatively small.

Upon converting items of debt into percentages of the total, it appears that about 55.9 per cent is represented by real estate mortgages, about 14.0 per cent by chattel mortgages, about 9.0 per cent by liens of crop other than cotton, about 7.8 per cent by cotton crop liens, and about 5.0 per cent by unsecured debts owing to local merchants.

TABLE VII. — *Agricultural debt, 1910.*

Item	For farms operated by			
	Total		Owners	Tenants
	Amount	Perc.	Amount	Amount
Real estate mortgages	\$ 2,793,000,000	55.9	\$ 2,293,000,000	\$ 500,000,000
Long-term crop liens	390,000,000	7.8	About $\frac{1}{5}$ in number	About $\frac{1}{5}$ in number
Short-term crop liens	450,000,000	9.0	About $\frac{2}{5}$ in number	About $\frac{2}{5}$ in number
Collateral mortgages	700,000,000	14.0	About $\frac{1}{2}$ in number	About $\frac{1}{2}$ in number
Accounts, unsecured, with local merchants	250,000,000	5.0	About $\frac{2}{3}$ in number	About $\frac{1}{3}$ in number
Miscellaneous, for farm purposes, unsecured, on farm property, to make round total	417,000,000	5.0	—	—
Total . . .	\$ 5,000,000,000	100.0	—	—

Note. — Debt of agricultural labourers not included.

§ 5. MORTGAGES TO SECURE PURCHASE MONEY.

Attention has already been called to the fact that as the value of real estate has advanced, the real estate mortgage debt has also advanced, although in a less degree. The common procedure in buying farm in the United States is to advance a portion of the purchase money and secure the payment of the remainder by giving the security of a mortgage on the real estate. As already stated (§ 1), transactions of this sort do not make no demand upon the loan market and the business is performed by exchanging the deed for a mortgage and some cash.

The percentages of the mortgage debt on farms operated by owners and for different purposes of indebtedness were quite accurately determined in the investigation of farm and home tenure and indebtedness in the census of 1890. Probably the results of that investigation in this respect are substantially sound for the present time. Table VIII exhibits a condensed classification of the purposes of real estate mortgage debt on farms operated by owners and the corresponding percentages have been added for homes other than farms for the purpose of comparison.

It was found in the course of that investigation that a single mortgage often represented debts incurred for various purposes and it was impracticable to separate these into the amounts representing the different purposes. It was determined by that investigation that 64.3 per cent of the entire real estate mortgage debt on farms operated by owners was incurred to secure the purchase of real estate without the inclusion of indebtedness for other purposes; that 4.53 per cent. was incurred to secure the purchase of real estate without the inclusion of indebtedness for other purposes; that 4.53 per cent. was incurred to secure indebtedness incurred for the purpose of making real estate improvements without complications with other purposes; and 5.31 per cent. of the debt was incurred to secure indebtedness because of the purchase of real estate and the making of improvements thereon, both purposes being combined in the indebtedness.

Various combinations of purposes are stated in the table and, with estimates in these cases for indebtedness to secure real estate purchases it seems probable that all together the indebtedness incurred for these purposes amounted to about three-fourths of the total indebtedness.

When that investigation was made, it was a time when there were many assertions of calamity in the affairs of farmers and it had been assumed that a large fraction of the farmers' mortgage debt was for calamitous reasons. It was discovered on the contrary that only 2.83 per cent. of the entire real estate mortgage debt on farms operated by owners was incurred to secure the payment of farm and family expenses. In this class were included substantially all of the calamity items of indebtedness.

TABLE VIII. — Percentage of families in the United States occupying owned and incumbered farms, and other homes, and percentage of the total incumbrance on such farms, and other homes, classified by objects of debt: 1890.

Objects of debt	Owned and incumbered farms		Owned and incumbered homes other than farms	
	Per cent of families occupying such farms	Per cent of total incumbrance on such farms	Per cent of families occupying such homes	Per cent of total incumbrance on such homes
Purchase of real estate	60.63	64.38	53.35	52.95
Real estate improvements	6.79	4.53	23.48	21.91
Purchase and improvements (combined)	3.98	5.31	5.28	6.38
Business	1.62	1.95	5.66	8.09
Grain machines, domestic animals, and other personal property	2.77	1.19	0.54	0.19
Purchase, improvements, business and personal property (two or more combined) (1)	5.01	6.15	1.92	3.14
Purchase, improvements, business and personal property (combined with objects other than farm and family expenses) (1)	0.84	1.34	0.38	0.59
Purchase, improvements, business and personal property (combined with farm and family expenses) (1)	9.83	9.52	2.60	2.45
Farm and family expenses	5.89	2.83	4.50	1.78
All other objects	2.64	2.80	2.29	2.52
Total for purchase and improvements (not combined with other objects)	71.40	74.22	82.11	81.24
Total for purchase, improvements, business and personal property (not combined with other objects)	80.80	83.51	90.28	92.66

(1) The combination of purchase and improvements alone is not included. A preceding line is provided for this combination.

As already stated, real estate mortgage debt on farms occupied by farmers has increased enormously during 20 years, because three-fourths

of the amount is caused by the purchase of farms on credit. Further light may be thrown upon this subject by calling attention to the facilities with which real estate is bought in the United States. The procedure is simple; the title can be passed from one person to another within a day or perhaps a few hours. As an illustration of the mobility of real estate ownership, it was ascertained and reported in the investigation of farm and home tenure and indebtedness in the census of 1890 that in Massachusetts real estate deeds, not including mortgages, made during the 10 years 1880 to 1889, averaged one to 36 inhabitants annually or one deed to about 8 families. It is true that Massachusetts is a densely populated State and that most of these deeds were for urban and suburban real estate. Nevertheless, it is to be borne in mind that the transfer of title to a farm may just as easily be made as the transfer of the title to city or suburban real estate.

(To be continued)

JAPAN.

WORK OF THE JAPANESE MORTGAGE BANK

(NIPPON KWANGYO GINKO).

SOURCES:

SANJU KI EIGYO HOKWAN. *Kabushiki kwaisha Nippon Kwangyo ginko (Thirtieth Report on the Operations of the Japanese Mortgage Bank)*. Tokio, 1912.

ON KWANGYO GINKO HO (*Law on the Japanese Mortgage Bank*). Tokio, 1912.

ON KWANGYO GINKO TEIKWAN (*Rules of the Japanese Mortgage Bank*). Tokio, 1912.

BANKING SYSTEM OF JAPAN. National Monetary Commission. Document 586. Washington. Government Printing Office, 1911.

Dr. Chuji Shimooka's article, published in the *Bulletin of Economic Social Intelligence* for January, 1913, dealt at large with the objects, organization and work of the largest Japanese mortgage credit institute. I think it advisable here to add some more recent information (the rest in the above article for the most part refer to the year 1910-1911) to the work of this Bank, so as to bring into stronger relief its importance to the general economy of the country and especially for agriculture. In this article, therefore, we shall deal with the business of the Bank in the last six months of the financial year 1911-12, that is, in the period between January 1st. and June 30th., 1912.

§ 1. GENERAL SITUATION OF THE BANK ON JUNE 30th., 1912.

The total amount of loans applied for during the above period was 15,288 yens (84,539,700 frs.); that of the loans granted was 21,080,351 yens (54,808,900 frs). Let us compare the various classes of loans granted in the second six months of the financial year 1911-1912, with those granted in the two preceding years :

Kind of Loans	Second Half Year 1910-11		Second Half Year 1911-12		First Half Year 1911-12	
	Number of Loans	Amount Lent (yens)	Number of Loans	Amount Lent (yens)	Number of Loans	Amount Lent (yens)
Made Directly by the Head Office	528	9,697,381	588	12,468,210	481	6,755,531
On Security	11,358	25,547,938	7,977	15,435,481	7,818	14,354,813
On Special Security	—	—	2	250,000	—	—
Total	11,886	35,245,319	8,567	28,153,691	8,299	21,010,331
Guarantee of Bonds on the Industrial Agricultural Banks	1	120,000	—	—	2	70,000
General Total	11,887	35,365,319	8,567	28,153,691	8,301	21,080,331

It is seen that the total amount of loans considerably decreased between June, 1911 and June, 1912. This decrease, amounting to about 40 %, is still more noteworthy when we consider that the amounts of credits to the industrial agricultural banks has also decreased, so that, all on the one hand, it may mean that these latter institutes have acquired a greater independence, on the other, it may represent a considerable stagnation of business.

The *Nippon Kwangyo Ginko*, from the date of its institution to the 30th. of June, 1912 had granted loans for a total amount of 206,666,944 yens. The amounts repaid during the same period amounted to 59,981,100 yens; the balance on June 30th., 1912 was therefore 146,679,838 yens, as appears in the following table.

Kind of Loans	Loans Granted		Loans Repaid		Balance	
	Number of Loans	Yens	Number of Loans	Yens	Number of Loans	Yens
Loans Made Directly by the Head Office . . .	3,646	89,576,815	774	38,049,883	2,422	51,526,931
Loans on Security . .	50,440	114,288,159	3,121	20,048,234	47,319	94,239,925
Loans on Special Security	332	1,719,358	157	1,076,442	50,416	642,936
Total . . .	54,468	205,584,332	4,052	59,174,539	—	146,409,793
Guarantee of Bonds of the Industrial Agricultural Banks	29	1,076,614	22	806,569	7	270,045
General Total . . .	54,497	206,660,946	4,074	59,981,108	50,423	146,679,838

At the same date the amount of discounted bills was 1,523,280 yens, after a rapid glance at the general situation of the Bank on June 30th., 1912, we shall examine more closely the various operations conducted in the second half year 1911-12.

§ 2. LOANS AND BILLS DISCOUNTED.

(a) Loans Repayable in Annual Installments.

These loans, which, as we know, the Bank makes, according to circumstances, on mortgage or not (special loans to provinces, communes, and syndicates for the readjustment of farms, etc.), amounted at the end of the financial year 1911-12 to a total of 140,662,379 yens.

The situation was, at that date as under:

	Number of Operations	Amount of Loans (Yens)
Brought Forward from the last six months . .	42,514	126,737,105
New Loans Granted in the six months . . .	8,279	20,785,104
Total . . .	50,793	147,542,209
Repaid in the six months	932	6,859,829
Balance on 30/6/1912	49,861	140,682,380

Among these loans are of course included those made to provinces, agricultural-industrial banks, to the Banks of Taiwan (Formosa) and Hokkaido, appearing under the head of loans on special security, the amount of which amounted to 642,926 yens. The other loans, that, naturally, are among the most important operations of the Bank from the economic and social point of view, may in their turn be divided into two large classes: 1st., loans on mortgage, 101,761,884 yens: 2nd. loans, to public corporations, syndicates and co-operative societies, 38,257,560 yens.

We give below the details of this second class.

	Number of Loans	Amount (yens)
To Public Associations	832	22,329,443
To Syndicates for Farm Readjustment	2,438	13,487,391
To Various Co-operative Societies	963	2,247,816
To Co-operative Fishing Societies	58	193,000
Total	4,291	38,257,560

Among the loans on mortgage, which we have seen amounted to 101,761,883 yens, are also included 6,907 loans for an amount of 39,516,000 yens: these operations are included in those authorized by article 14 of the law on the Bank itself, that is to say, they are loans on mortgage land built on or building lots, or real estate either situated in inhabited localities coming under the city (*shi*) régime, or such as may be eventually indicated by Imperial Decree, exclusive of land or buildings belonging to industrial establishments.

(b) *Fixed Term Loans.*

The Mortgage Bank further lends for fixed periods on mortgage on real estate or on fishing rights, or in certain cases, without mortgage, always, however, for a term not exceeding 5 years.

On the 30th. of June, 1912, the situation in respect to these loans was as follows:

Balance brought forward	yens	6,039,780
Loans in the half year	"	225,250
Total	yens	6,265,030
Repaid in the half year	"	517,617
Balance, 30/6/1912	yens	5,747,413

We may also distinguish the loans on mortgage on real estate, amounting to 5,424,365 yens and those not on mortgage, on security or not, as follows:

	On Security	Without Security	Total
Loans to Public Associations yens	131,680	10,418	142,098
" Co-operative Societies "	80,950	100,000	180,950
Total . . . yens	212,630	110,418	323,048

Amongst these loans are 309 for an amount of 3,524,100 yens, made in conformity with article 14 bis of the above law.

(c) *Bills Discounted.*

In the above six months the Bank discounted bills for a total amount of 1,523,280 yens. We have thus the following situation.

Balance from previous six months yens	794,563
Bills Discounted in the six months "	1,523,280
Total . . . yens	2,317,843
Amounts collected "	1,875,418
Balance, 30/6/1912 . . . yens	442,425

We find a considerable decrease in the amount of Bills and Acceptances held by the Bank in the first and second six months of the working year 1911-1912.

(d) *Guarantee of Industrial Agricultural Bonds.*

The Mortgage Bank may, within limits and on definite conditions, guarantee the land bonds of the industrial agricultural banks (1).

(1) See above mentioned article in the Bulletin of Economic and Social Intelligence, January, 1913.

In the second six months of the working year 1911-1912 the situation with regard to operations of this kind was as follows :

	Nominal Value of the Industrial Agricultural Bonds	Res.
Balance from the preceding six months . . . yens	211,710	202
Guarantee given in the six months "	70,000	70
Total yens	281,710	272
Redeemed in the six months "	2,450	1
Balance, 30/6/1912 "	279,260	270

§ 3. LAND BONDS.

On January 1st., 1912 the mortgage bank had issued land bonds a total amount of 131,789,610 yens (342,646,200 frs.). Up to the same date it had redeemed bonds to the amount of 15,810,010 yens : the bonds in circulation on January 1st., 1912 amounted therefore to 115,979,600 yens.

In the second six months of the working year 1911-12, the Bank issued 310,750 land bonds for an amount of 14,840,000 yens. (38,580 frs.). As it had during the same time redeemed bonds to the amount of 4,200,880 yens, it follows that the amount of the bonds in circulation at the end of that six months was 126,616,720 yens. The 310,750 land bonds issued for a total amount of 14,840,000 yens in the second six months 1912 are of five different issues.

1st. and 2nd. issue, 384 bonds for 10,000 yens (25,800 francs). Total 3,840,880 yens. Interest 4.5 % per annum.

The 1st. issue was made on January 31st., the 2nd. on May 15th., 1912.

The bonds were issued at par and were all subscribed. They are redeemed by drawings, twice a year : at each drawing bonds must be drawn for the amount of at least 50,000 yens. The extreme term of redemption is 18 years.

3rd. issue. 10,366 bonds for 100, 500, 1,000 and 5,000 yens, for a total amount of 5,000,000 yens. Interest 5.5 % per annum. The bonds were issued at 97 and were subscribed to the amount of 5,200,000 yens, that is 200,000 yens more than the nominal value. They are redeemed by drawings twice a year : at each drawing bonds for not less than 50,000 yens must be drawn. Extreme term for redemption : 27 years.

4th. and 5th. issue. Each of them of 150,000 bonds for 20 yens. Total 6,000,000 yens. The fourth issue began on February 2nd., 1912.

on June 5th. Interest 5 % per ann. The bonds were issued at par were subscribed for 704,160 yens beyond nominal value. They redeemed in a maximum period of 40 years by means of successive drawings. Up to the sixteenth drawing inclusive these take place times a year : each time for an amount of at least 9,000 yens. From 17th. to the 85th., the drawings take place twice a year : up to the inclusive, each time for an amount of at least 15,000 yens ; from the forward, each time for at least 45,000 yens.

The first drawing of bonds of the fourth issue took place in July 1912, of the fifth issue in August.

These two last classes of bonds are prize bearing. For each of the two es there are 450 prizes for an amount of 30,750 yens at the first drawing 240 prizes for an amount of 8,910 yens at each successive drawing. total amount of the prizes is 796,900 yens for each class and 1,453,800 in all.

The increase in the prize fund for these bonds has been as follows :

ght Forward from the Previous six months . . .	yens	648,919,427
ed to Prize Fund during the six months	"	57,999,030

Total	yens	706,918,457
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as paid in the six months	"	43,991,810
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Balance on June 30th., 1912 . . .	yens	662,926,647
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The Japanese Mortgage Bank is authorized to issue mortgage bonds lower interest for conversion of mortgage bonds previously issued, out, however, being bound by the legal restrictions on the issue of any land bonds. However, after an issue of these mortgage bonds w interest, the bank is bound within a month from date of the , to redeem by means of drawing ordinary land bonds for an amount l to that of the new issue.

In the second six months of the working year, 1911-12, there was no of this kind : however, the extinction of those previously issued con- ed, to the amount of 191,160 yens. These bonds are all prize bearing ; nominal value is 5 yens, and they bear interest at 3 %, while the value e others may not be less than 10 yens, and they bear interest of from to 6 %. The circulation of these bonds at the end of the six months as follows :

ght Forward from Previous six months	yens	18,966,625
ed in the six months	"	191,160

Balance on June 30th., 1912 . .	yens	18,775,625
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The total issues of these bonds from the date on which the Bank commenced working amounted to 20,432,600 yens ; of which 1,656,975 yens were repaid within the second half year 1911-12.

Article 34 of the law on the *Nippon Kwangyo Ginko* allows the Bank to issue land bonds, after extinction of those converted, up to ten times the amount of the share capital : still the amount of the bonds cannot exceed that of the loans redeemable in annual instalments, plus the amount of industrial agricultural bonds that the Bank guarantees.

The following data show that the above conditions have been observed

Amount of Loans Redeemable in Annual Instalments	yens	140,662.3
Agricultural Industrial Bonds Guaranteed by the Mortgage Bank	"	270.0
Total	yens	140,932.4
Amount of Ordinary Land Bonds in circulation, June 30th., 1912	"	124,616.4

There was therefore a balance of 14,313,705 yens.

§ 4. PROFIT AND LOSS ACCOUNT.

Before closing these notes on the work of the Japanese Mortgage Bank we shall give a summary of the profit and loss account of the Bank for the second half year 1911-12. The accounts were closed with a net profit of 1,030,529 yens (2,679,650 frs). The profits (5,823,907 yens) consist almost entirely of the interest on loans, amounting to 5,221,705 yens. The losses on the other hand (4,793,380 yens) are more than half due interest on bonds (2,724,092 yens.). Let us give a few further details with regard to these accounts :

(a) Profits.

Interest on Loans	yens	5,221.7
Discount on Bills	"	18.1
Interest on Deposits in the Savings Bank and other Institutions	"	419.9
Interest and Dividends on Bonds belonging to the Bank	"	28.0
Various Commissions	"	120.7
Profits on Bonds belonging to the Bank	"	2.7
Other Profits	"	12.6
Total	"	5,823.9
Balance from Previous Half Year	"	104.8
Total	"	5,928.7

(b) *Losses*

Interest on Land Bonds	yens	2,724,082
Interest on Land Bonds	"	220,400
Interest and Prizes on Converted Bonds	"	372,641
Interest on Deposits	"	230,667
Insurance Commissions	"	579,116
Ordinary and Extraordinary Expenditure on Bonds	"	224,742
Interest	"	139,747
Interest and Bonuses	"	146,963
Interest Expenditure	"	76,895
Interest on Bonds held by the Bank	"	1,055
Interest Losses	"	3,564
Interest Payments	"	6,360
Interest in Redemption of Bonds	"	49,147
Total	"	4,793,379

The total profit for the half year, 1,030,529 yens, represents an annual profit of 33 % on the paid up capital (6,250,000 yens). The total half year profit (net profit plus balance from the preceding six months) is 5,358 yens, divided as follows :

Reserve Fund	yens	165,000
" " for Dividends, (1)	"	41,000
Interest to the Higher Employees	"	75,000
Dividends	"	664,000
Special Reserve Fund	"	85,000
Interest Forward	"	105,558
Total	"	1,135,358

In view of the results of the second half year 1911-12 and in view of estimate for the next working period, the Minister of Finance has conceded the maximum rates of interest already approved for the previous months, for the various loan operations. (Cfr. Bulletin of Economic Social Intelligence, January, 1913, p. 124).

To complete and summarise our statements we reproduce the balance sheet of the Japanese Mortgage Bank for the second half year 1911-12.

(1) Article 43 of the law on the Mortgage Bank orders that every year 8 % of the profits shall be placed to the reserve fund to meet the annual loss of capital and at least of the profits shall be deducted so that there may be no variation in the annual dividend.

<i>Credits.</i>		<i>Debits.</i>	
Paid up Capital . . . yens	6,250,000.00	Share Capital . . . yens	20,000,000.00
Loans Repayable in Instalments . . .	47,648,513.36	Reserve Fund . . .	1,591,300.00
Loans Repayable in Instalments, Secured	92,370,930.97	Dividend Reserve Fund	397,100.00
Loans Repayable in Instalments with Special Guarantee . . .	642,935.60	Special Fund	1,042,000.00
Term Loans	3,878,417.95	Dividends	10,048.40
Term Loans, Secured	1,868,995.00	Land Bonds in Circulation	126,616,720.00
Guarantee of Industrial - Agricultural Loans	270,045.00	Converted Bonds	18,775,625.00
Short Term Loans	2,500.00	Fixed Term Deposits	419,539.00
Discount	442,425.00	Deposits in Current Account	102,971.00
Deposits in Savings Banks	18,462,660.00	Deposits in Special Current Account	300,470.00
Deposits in Other Institutions	2,297,502.10	Deposits Repayable on Demand	500.00
Current Accounts of Post Office Savings Bonds	80,062.80	Special Deposits	647,069.00
Public Debt Securities	981,456.38	Deposits at Sight	3,795,751.00
Increase in Value of Banks	824,044.00	Interest and Prizes on Bonds	2,416,120.00
Collected by Agencies on Bonds	410,700.00	Funds for Prizes on Bonds	786,880.00
State Loans	223,903.75	Collected for Account of Third Parties	47,216.00
Office Buildings	87,337.58	Extraordinary Expenses	20,000.00
Office Furniture	18,496.87	Brought Forward from Previous Account	104,828.00
Real Estate belonging to the Bank	76,917.68	Profit	1,030,529.00
Payments on Account of Third Parties	461,796.56		
Cash in Hand	104,698.79		
Total	178,104,762.42	Total	178,104,762.42

Part IV: Miscellaneous

PORTUGUESE COLONIES.

(Saint Thomas and Prince's Island).

ORGANISATION AND CULTIVATION OF ST. THOMAS AND PRINCE'S ISLAND.

OFFICIAL SOURCES:

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§ 1. AGRICULTURAL AND COLONIAL IMPORTANCE
OF SAINT THOMAS AND PRINCE'S ISLAND.

On account of their extraordinary fertility, these islands are probably the richest of all the Portuguese colonies. Both were discovered in 1482 by João de Santarem and Pedro Escobar, but discouraging reports as to their climate hindered their economic development until the successful cultivation of the sugar cane raised them into importance.

Their development, however, was not without its critical periods, the most serious occurring about the end of the XVIIIth. century and the beginning of the XIXth., when cultivation of the sugar-cane in Brazil diverted the attention of the mother country. About this time (in 1792) coffee was introduced, and a little later cacao, the cultivation of which was so successful that it soon became the most important industry, saving the planters from ruin.

The islands, lying between lat. N. 0.01' and 1°40' S. and long. 6°25' 40" and 7° 28' E. of Greenwich in the Gulf of Guinea almost on the equator, have a total area of about 1,200 square kilometres, of which 1,120 belong to St. Thomas and 113 to Prince's Island.

Relying, in the absence of an agricultural map of the island upon the information supplied by cultivators and the administrative authorities, we may divide this area as follows:

St. Thomas...	{ Under cultivation . . .	Hect. 52,407	
	{ Devoted to roads, dwelling houses etc. . . .	" 5,526	
	{ Uncultivated	" 45,067	103,000 Hect
Prince's Island	{ Under cultivation . . .	Hect. 9,881	
	{ Devoted to roads, dwelling houses etc. . . .	" 1,077	
	{ Uncultivated	6,042	17,000 Hect
			120,000 Hect

At the present time the population is estimated at 68,221, of which 66,171 are negroes, 2,000 Europeans, and 50 natives of Portuguese India and Macao. This gives an average of rather more than one inhabitant (1.093) to each hectare under cultivation, a very small ratio considering that of the 68,221 inhabitants, there are really only 40,000 actively engaged in agriculture (0.642 per hectare); the remainder, in the case of Europeans, are overseers who do little or no work. At the same time the supply of labour is totally insufficient.

The island of St. Thomas is mountainous with a soil of volcanic origin. Some of the mountains are of great height, *Pic Calvario* for example.

de (1,850 metres), and *Pic Saint Thomas*, the central point of island (2,142 m.). Prince's Island is less mountainous but is also volcanic origin. Both islands are well watered.

The climate is unsuited to Europeans. In the rainy season it is particularly unhealthy on the coast and the low-lying parts of St. Thomas. In the interior, however, where the more important agricultural areas are, the climate is temperate, almost healthy for negroes, and not endurable to Europeans, an advantage which does not exist in the case of Prince's Island. Thanks however, to the measures taken by the Government, the population continues to increase, having risen from 3,636 in 1908 to 4,309 in 1912.

Throughout the island of St. Thomas, which is covered by forests of striking beauty, there are scattered large estates managed either directly by the proprietors or by their agents. These estates are devoted chiefly to the cultivation of cacao and coffee, and in a less degree to quinquina, kola, guavas, oranges, papaws, lemons etc.

It would be interesting to give some statistics of the production of the colony, but as no such statistics have been compiled, we can only give the summary returns of produce exported in 1911.

Produce exported in 1911	Saint-Thomas		Prince's Island		Value in francs of the produce exported by the colonies in 1911.
	Kg.	Value in francs	Kg.	Value in francs	
Cacao	28,948,857	33,385,426.83	2,363,277	2,808,587.80	36,194,014.63
Coffee	746,574	926,114.33	1,337	240.75	926,355.08
Other products . . .	—	436,434.14	—	19,672.87	456,107.01
Total . . .	—	34,747,975.30	—	2,828,901.42	37,576,476.72

This total of 37 million francs is a proof of the importance of the colonies. But we must add that in fifteen years re-exported colonial produce reached 750,000,000 francs, 99.54 % of this sum being contributed by Angola and St. Thomas, almost in equal parts. We must note, however, that Angola has an area of 1,225,775 square kilometres, while the total surface of St. Thomas and Prince's Island together measures only 1,200 square kilometres, and also that the re-exports of the produce of Angola have been practically stationary for the last twelve years, while those of St. Thomas are constantly increasing. Thus, in the years 1896-1898 the re-exportation of produce from Angola stood at an annual average of 950,000 francs or 71 % of the total, while that of St. Thomas was 100,000 francs (9.530,000 francs). In the annual averages 1908-1910, re-exports from Angola amounted to 25,420,000 (39 % of the whole) while those from St. Thomas reached 38,565,000 francs, the position being almost

reversed. In both earlier and later periods, the value of re-exports from other colonies is given as only 1 %.

These figures show clearly the importance of St. Thomas to Portugal.

§ 2. ORGANISATION OF ESTATES AND METHOD OF CULTIVATION.

The organisation of property is similar to that of the mother-country, but large estates are the rule. Of 62,288 hectares under cultivation in these islands 22,360 (36 %) represent estates the extent of which is from 1,000 to 5,500 hectares; 21,829 hectares (34 %) are in estates from 500 to 1,000 hectares, 17,599 hectares, (29 %) to farms of from 500 hectares and about 500 hectares (0.8 %) are in small estates of less than 5 hectares. These estates (*roças*) belong to individual proprietors in the proportion of 76 % and to societies and limited liability companies in the proportion of 24 %. The following table includes the most important of these companies:

Name	Capital	Area cultivated Hectares	Area not Cultivated Hectares	Production of cacao in kg.
Comp. Agricola da Ilha de S. Thomé	2,500,000	990	3,900	154,70
Comp. Agricola da Ilha do Principe	18,000,000	6,160	4,800	2,548,57
Comp. Roça Porto Alegre . . .	10,000,000	1,710	1,272	834,88
Comp. Agricola das Neves . . .	5,000,000	1,170	200	720,00
Comp. Roça Vista Alegre . . .	2,500,000	270	—	186,07
Comp. Agric. Graia Grande . . .	1,555,540	450	300	189,16
Soc. de Agriculture Colonial . .	9,000,000	5,171	2,655	1,050,18
Empresa Agricola do Principe . .	4,200,000	1,415	500	230,65

As the table shows, these companies do not cultivate the whole of the land belonging to them. The same is true of private individuals and is owing to the scarcity of labour.

In 1911, for example, the largest proprietor, who held 10,350 hectares cultivated only about 5,850, as he could not obtain more than 3.84 paid negroes. He nevertheless succeeded in producing 345,380 kg. of coffee and 3,438,540 kg. of cacao. The position is the same in most of the *roças*. The area cultivated comprises about 62,288 hectares, and the

agricultural labour is performed by about 40,000 individuals, that is about one person to ten hectares, certainly a very small proportion. Even if the negroes were sufficient, 35,000 negroes would still be required for the 51,109 hectares not yet under cultivation.

Let us now consider the organisation of one of the large estates, for example the *Roca Agua Izé* belonging to the *Companhia da Ilha do Príncipe* in St. Thomas. This *roça* has an extent of 8,000 hectares of which 5,000 are utilised (3000 in plantations and 1,800 in railways, buildings, roads, etc.); 3,200 still remain to be cleared.

Agua Izé is divided into six districts. In one is the central administration (Praia Rei) where the director, the European staff and their servants reside; in the others are the foremen and the labourers employed in gathering the crops. The produce is collected in the various districts and sent by rail (in this *roça* there are nearly 45 kilometres of railway belonging to the company) to headquarters where it passes through certain processes before being shipped.

At Praia Rei, which is almost a town, there are warehouses and wide streets of land where cacao and coffee are dried in carts which can be drawn under shelter when it rains, the whole occupying about 20,000 square metres.

On receipt of an order the goods are shipped from the port of the *roça*.

In the *Roca Agua Izé* there are no fewer than 2,500 negro labourers under the direction and supervision of 50 Europeans.

It must be added that the Company does not neglect the needs of the negroes. At Praia Rei there is a large hospital and ambulances for the most districts. The mothers have the advantage of crèches, etc.

§ 3. AGRICULTURAL LABOUR IN ST. THOMAS.

In addition to the Europeans who supervise and direct the *roças*, and natives of the islands who are generally small landowners or fishermen who do not work for hire, there are 40,000 negroes employed as labourers on the estates. The plantations of cacao and coffee are being extended, and the government has permitted the immigration of natives of other colonies, Mozambique, Cape Verde, Cabinda and Angola. Some account therefore is necessary of the regulations respecting the engagement of the negroes, their economic condition, the nature of the work, etc.

(a) *Recruiting of labourers for St. Thomas.* We shall here speak only of labourers from Angola because they are most numerous and perhaps the best from an economic point of view. First, let us take the method of procuring them. By a decree of July 20th, 1912 the agriculturists, manufacturers and merchants of St. Thomas and Prince's Island who require labourers must adopt one of the following methods:

1st. Such agriculturists, manufacturers and merchants may meet and elect by ballot a Recruiting Committee (*Junta de Recrutamento*) composed of seven members, five from St. Thomas and two from Prince's

Island, who will have charge of the necessary funds. They first nominate a Chief Agent to undertake all the recruiting with the assistance of subordinate agents whose names must be submitted for approval to the governor of the Province of Angola and to the governors of the respective districts. The Chief Agent, sub-agents, and assistants receive a fixed salary with extra payments in proportion to the number of negroes engaged. They have a monopoly, and any other person convicted of recruiting is punished by a fine of from 2,500 to 5,000 francs, and for one to five years' imprisonment. The agriculturists, manufacturers and merchants must pay between March and September an advance of 1,500 reis (7.50fr.) for each labourer they require. The whole amount forms a permanent recruiting fund to be deposited in the branches of the *Banque d'Ouverture*, or other similar establishments, to be at the disposal of the Committee. Besides this, the Committee receives from the agriculturists, manufacturers and merchants the necessary funds for paying the salaries of the recruiting agent and his subordinates, and the payments due to the State in virtue of Art. 29 of the decree of March 27th., 1911 (1) up to 7,200 reis (36fr.) for each engagement.

2nd. Agriculturists, manufacturers and merchants may form an Emigration Company for St. Thomas according to the laws in force, provided that the statutes of the proposed company be submitted to the government for approbation. Such a company possesses the same powers as a Recruiting Committee. The principals interested have preferred this method, the *Sociedade de Emigração para S. Thomé e Príncipe* has been constituted, and its statutes approved by the decree of Nov. 2nd., 1912. It is a limited liability company under the Commercial Code, with a capital of 20,000,000 reis (100,000fr.) divided into 200 shares, but the Council of Administration may raise the amount to 500,000 fr. The head office is at Lisbon, but there will be branches in the Portuguese colonies where emigration is permitted, and also at St. Thomas. The St. Thomas branch will appoint the Recruiting Agent, who will select his subordinates subject to the approval of the authorities of the province of Angola.

The applications for labourers must be made between March and September to the St. Thomas branch, and the allotment of the labour will be made later in proportion to the applications.

It must be added that this company will not seek to make a profit and the sums promised in advance by the agriculturists will only be deducted up to an amount approximately equal to the estimated expenses. If any profits are made they will be divided thus: 5% of the net profits to a permanent reserve fund not to exceed one-fifth

(1) These payments are graduated according to the number of months for which labourer is engaged as follows:

Up to six months	fr. 2,50
" " nine "	" 2,25
" " one year	" 2,00
" " one year 6 months	" 1,75
" " two years	" 1,50

capital, and any residue to a special reserve fund to cover deficits management expenses.

Let us now see what the agents of the Company do in Angola, first pointing out that male natives in Angola as in other Portuguese colonies are free, but under a moral and legal obligation to seek work (2 of the decree of the 27th. May, 1911) unless they possess the means of existence, cultivate their own land, work for wages for a certain number of months in each year, or unless they are ill or under the ages of 14 or over 60.

The natives are compelled to work, but they are free to give their services anywhere within the limits of the territory, and the natives of Angola may also work outside it. Under certain conditions the Company's agents offer them work at St. Thomas, and if they accept both parties must sign a labour contract before the Curator General of Angola, a competent official and a judge of appeal, or before his representative. The Curator and his representatives must not give their sanction unless they are convinced that the parties are not acting under compulsion.

These contracts are made according to the Portuguese Civil Code, according to the terms of Art. 17 of the decree of the 27th. May 1911, they must stipulate (a) that the engagement shall not exceed two years; (b) what kind of work is to be done; (c) the amount of remuneration in money; (d) the place where the work is to be done.

All contracts must also contain clauses requiring the employer, (a) to make due provision for labourers who may fall ill; (b) to give them sufficient food; (c) to provide healthy quarters and clothes; (d) to refrain from direct or indirect restraint as to their purchasing articles of necessity; (e) not to withhold any portion of their wages; (f) to refrain from corporal punishment including deprivation of food; (g) to undertake to send the labourers back to their homes with due attention to their comfort and under proper hygienic conditions on the expiration of the contract.

By the terms of Art. 28 of the decree, the travelling expenses of the labourers both in going and returning must be paid by the employers, the Curators must ascertain that the journey is made under suitable conditions.

(b) *Nature of the work.* — The negroes are employed in cultivating and gathering the various crops grown on the estates, but chiefly in sugar and coffee. For the rougher and more severe work, such as the clearing of forest-land, or the preparation of land for cultivation, imported labour is rarely employed. For such work the *angolares* (descendants of natives of Angola shipwrecked on St. Thomas in 1540) make a contract. In fact the imported negroes only plant the land prepared by the *angolares* and are in turn employed in lopping trees, in harvesting, in sorting and separating different kinds of produce, in packing and carrying produce to ports of embarkation. The inland transport is carried by means of narrow gauge railways.

The preparation of cacao consists in breaking the pods, ferment drying, sorting, putting into sacks, etc.; that of coffee in husking, to ing, etc.

(c) *Wages system.* This is identical for the different kinds of our, and consists in wages paid monthly in addition to food, lodging, clothing and medical attendance for the labourers and their families, comprising even those members who cannot work. As already said the *golares* only work by contract.

The labourers have no precise task to finish. They do what they can and receive their wages at the end of the month whatever be the work done by them. But those who distinguish themselves by doing more work than the rest receive rewards. Those who do not yet know to do the work receive their monthly wages notwithstanding, during time of their apprenticeship, which is short.

The law fixes the minimum monthly wage for negro men at 2 reis (12.50fr.) and for women 1,800 reis (9 fr.). In Mozambique the minimum is 3,500 reis (17.50 fr.) and some of the Angola and Cape Verde groes receive 3000, 4000, and 5000 reis (respectively 15, 20, and 25 francs).

(d) *Living conditions for the native labourers.* We have seen the climate though merely tolerable for a European may be considered excellent for negroes compared with their native lands. The regularity and moderation of the labour on the plantations makes it more endurable. Work begins at six a. m. and continues for nine and a half hours with two intervals, one from 8 to 8.30 and another from a. m. till 1.30 p. m. These hours of leisure are often devoted to dance.

The labourers have no anxiety about their maintenance or that of their families, since this devolves on the employer, as we have already seen. They have a right to leave the plantation without permission to make complaints against infraction of the contract or against ill-treatment (corporal punishment or deprivation of food being forbidden); they pay no taxes, and have a right to support in their old age or in case of incapability of work, etc.

§ 4. LEGISLATION FOR THE PROTECTION AND ASSISTANCE OF NATIVE LABOURERS AND PROVISION FOR THEIR FUTURE

The Government does not confine itself to the measures of which we have spoken. In St. Thomas and Prince's Island, in virtue of the law of 29th. April, 1875 and an order of 21st. November, 1878, the contract between employer and labourer, and even to oppose the conclusion of a contract if prejudicial to a negro; to ensure (either in person or through their representatives) that the clauses of the contract are carried out; to examine both sides into all necessary particulars; and to attend dire

deputy to all claims and complaints of the interested parties as to manner in which the rules are followed, and adjudicate in each etc.

Portugal does not forget to help the negroes. There are hospitals in all the principal towns, and by a decree of 2nd November, 1912, there will shortly be established in all the villages, as may be seen from following Articles which we quote:

Art. 1. — The Government is authorised to devote two-thirds of the revenue of the funds deposited in the *Cofre de Trabalho e Repatriação de S. Thomé e Príncipe* in respect of deceased contract labourers to the erection of cottage hospitals for natives in the villages of the province.

Art. 2. — The residue of these two-thirds of the net revenue of funds of the *Cofre de Trabalho e Repatriação*, after deducting the necessary for the object specified in Art. 1 and any further sums under § 2 of Art. 14 of the decree of 17th July, 1909, shall be devoted to the assistance and education of the natives.

Art. 3. — One-third of the sums mentioned in the above articles for "funds for assistance" shall be devoted to the erection of a sanatorium for the natives of the *Saude*.

Art. 4. — After the building of the hospitals the "funds for assistance" shall be employed for the founding and general expenses of agricultural and industrial schools or other works for the assistance and education of the natives.

For the further protection of the natives, proprietors who employ more than 50 labourers on an estate which is more than 50 km. from the nearest hospitals, are required to maintain separate infirmaries for each sex, and a dispensary. If the estate is within that distance the labourers must go to the Government hospital, but at the expense of their employer. The infirmaries, hospitals, crèches and dwellings, belonging to landowners and appropriated to the use of natives, are subject to the rules concerning health laid down by the government of the province on the report of the local Labour and Emigration Committee under penalty of a fine of from 250 to 6,000 francs.

St. Thomas is divided into 14 sanitary districts and Prince's Island into two, according to the terms of Art. 109 of the decree above quoted. In each district there is a Portuguese doctor paid by the proprietors, and his duty it is to visit twice weekly those estates employing 1,000 workmen and once weekly all the others, and more frequently in urgent cases. The work of women and children has not been forgotten. Art. 102 requires cessation from work for women during 30 days previous to and 30 days after confinement without suspension or reduction of salary, and during the first six months of nursing their infants the work of women is to be reduced.

Art. 105 prohibits the employment of minors from 11 to 14 years of age in any work except seed sowing, poultry raising and the other domestic occupations.

In matters of thrift the Government has founded the *Cofre do Trabalho e Repatriação* (Labour and Repatriation Bureau, and employees are bound to deposit there in advance a sum sufficient for the repatriation of the negroes and one half of their salary (Art. 97 of the Order of 17 July 1907) so that through this measure the employees are new without resources at the end of their contract. In last October the financial position of this bureau was as follows :

Balance of previous month :

Sent to the Colonial Ministry for investment	Fr. 1,500,000.00	
On deposit with branch banks of the Banque d'Outremer	„ 1,566,980.87	
Deposited during the month	„ 23,776.68	Fr. + 3,090,753.4
Withdrawn for repatriations	Fr. 24,420.76	
Withdrawn for the travelling expenses of the Government commissioners	„ 110.00	Fr. — 26,530.4

Credit account for the following month :

Sent to the Colonial Ministry for investment	„ 1,500,000.00	
On deposit with branch banks of the Bank d'Outremer	„ 1,564,222.00	
		Fr. + 3,064,222.0

The bank is under the direction of a *Local Committee for Emigration* composed of the Curator General of the province, one engineer the manager of one of the branch banks of the Banque d'Outremer and three proprietors or administrators of agricultural estates. The functions of this Committee determined by Art. 14 of the decree of 17th. July, 1907 may be summarised thus : to draw up rules for the management of work in the province, which it must submit to the Government ; to superintend the funds deposited in the Bureau for work and repatriation, and to administer them according to law ; to supply the various estates with negro labourers in proportion to their requirements ; to watch over the fulfilment of contracts, especially with reference to accommodation, attendance repatriation, renewal of contract etc.

These regulations are applicable to Prince's Island as well as to St. Thomas. The law of 17th. April, 1912, for combating sleeping-sickness does not, however, apply, to the latter.

According to this Law (17th April 1912) it is incumbent on employers provide at their own expense for the equipment of bodies of labourers engaged with the work of combating the tsetse fly, both directly through use of bird-lime and other efficacious means and indirectly, by clearing of dwelling-places, water-courses and their banks, by the removal of useless vegetation, of brush-wood (*capoeiras*) near water-courses, dwelling houses and sheds for animals, and by the protection of these with mosquito netting. Both the labourers and the animals in such cases must be provided with suitable clothing, treated with bird-lime. The Government on its part has appointed a sanitary commission to examine labourers on their arrival on the island, and to isolate those already infected by sleeping-sickness, to examine those about to leave and to examine any person likely to carry infection, and to carry out for areas not under private ownership the measures which are incumbent on proprietors on their own estates.

